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ABSTRACT

The Significant Bilingual Instructional Features (SBIF) study identified, described, and verified features of bilingual instruction of a wide variety of limited English proficient (LEP) students. It collected data on instructional organization, time allocation, classroom language use, active teaching behaviors, academic learning time, student participation styles, and classroom, school, and community context variables (Part I) and verified their utility in other settings (Part II). This report describes two verification studies: (1) in two additional classrooms nominated as "successful" bilingual instructional settings but serving different ethnolinguistic groups, and (2) in other classrooms serving LEP students but not nominated as successful and not necessarily bilingual. The first study found the five instructional features identified as significant in Part I (congruence of instructional intent, use of active teaching behaviors, use of the students' native language and English for instruction, integration of English language development with basic skills development, and use of information from the students' home culture) to be significant also at the two new sites. Results for the second verification study were somewhat less conclusive. (MSE)

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SIGNIFICANT BILINGUAL INSTRUCTIONAL FEATURES STUDY

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VERIFICATION OF BILINGUAL INSTRUCTIONAL FEATURES

by

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ABSTRACT

The Significant Bilingual Instructional Features (SBIF) descriptive study was designed to identify, describe, and verify features of bilingual education settings important for the instruction of limited English proficient (LEP) students. This report from Part II of the study describes two aspects of the verification procedures: (a) the verification of Part I findings in classrooms nominated as successful bilingual instructional settings but serving different ethnolinguistic groups than those in Part I (Substudy I-A), and (b) the verification of Part I findings in classrooms serving LEP students that were not nominated as "successful" and were not necessarily bilingual (Substudy I-B).

The features of interest identified during Part I were: (a) congruence of instructional intent, organization and delivery of instruction, and student consequences; (b) use of active teaching behaviors; (c) use of the students' native language (L1) and English (L2) for instruction; (d) integration of English language development with basic skills instruction; and (e) use of information from the LEP students' home culture.

Data for the substudies were collected through a variety of qualitative and quantitative procedures resulting in information on organization of instruction, allocation of time, active teaching behaviors, academic learning time, and student participation styles. The sample for Substudy I-A consisted of 21 classes at two sites (Illinois and Hawaii) not examined during Part I. The Substudy I-B sample included 46 classes at six sites; five of these sites (New York, Florida, Texas, Arizona, and California) participated in Part I of the study, one site (Oregon) was new.

Briefly, the results of Substudy I-A indicated that the five features were, to varying degrees, replicated at the two new sites. The presence of congruence of intent, organization and delivery of instruction, and student consequences was partially supported. Active teaching behaviors were used extensively. Two languages were used for instruction, most frequently to differentiate instruction for individual students. Some evidence for the integration of English language development with basic skills instruction and for the use of information from the LEP students' culture also was found.

Substudy I-B indicated that the ratings of active teaching were consistently high in both nominated and unnominated samples of classes. No strong relation between ratings on active teaching and proportion of L1 use during basic skills was detected. More time was allocated to basic skills instruction in the non-nominated sample but this difference was apparently related to district level changes rather than to nomination status or use of L1. The organization of classroom

instruction in both samples was highly structured and tended to be teacher-centered.

The use of L1 in the classes of the two samples was, to a great extent, a function of sampling strategy. L1 use was somwhat greater in the nominated sample than in the non-nominated sample; however, there was wide variety in usage within both samples. In the I-B sample there was some evidence that use of both languages for instruction had positive consequences for LEP students if the proportion of L1 use was substantial.

There was evidence that integration of language development with basic skills instruction and use of information from the students' home culture were present in both nominated and unnominated samples. The degree of similarity in the two samples was not unexpected since the classes in the two samples, in most cases, came from the same schools and the students in the I-B sample had, in most cases, been in well-run bilingual programs in the previous school year.

PREFACE

In October of 1980, the National Institute of Education (NIE) provided funding for the Far West Laboratory for Educational Research and Development (FWLERD) to form, in conjunction with eight other nationally prominent educational institutions and agencies, a consortium for the descriptive study of Significant Bilingual Instructional Features (SBIF). This is a three-year, multifaceted study of significant bilingual instructional practices and elements in bilingual instructional settings, and as such, it is part of the proposed work scope of the Part C Coordinating Committee on Bilingual Education Research (U.S. Department of Education). The intent is to provide important information that will increase understanding of bilingual instruction, and subsequently increase opportunities for students with limited or no proficiency in English to participate fully and successfully in the educational process.

The study was designed in two parts. Part I identified and described those features of bilingual instruction considered to be significant in terms of their consequences for limited English proficient (LEP) students. In Part II, these findings were verified in four major studies.

Part I of the study took place during the 1980-81 school year, and Part II occurred in 1981-82. Data analysis for Part I was accomplished by October of 1981. Part II data are undergoing analysis, and reporting will be completed by September of 1983, at which time the project terminates.

Overall Strategy of the Study

The SBIF descriptive study is one of several research activities guided by the Part C Research Agenda for Bilingual Education, in direct response to a Congressional mandate issued in 1978. In search of data to inform its consideration for renewal of support for bilingual education, Congress directed the Secretary of Education to "develop a national research program for bilingual education." In turn, the directors of the Office of Bilingual Education and Minority Language Affairs (OBEMLA) and the National Institute of Education (NIE) were instructed to coordinate a program of research to respond to Congress' questions.

Results from this study, along with those from other specially commissioned studies, are expected to provide Congress with information regarding instructional features that provide successful access to learning for LEP students, as well as the long-range consequences of these features. Furthermore, along with results from other studies conducted under the aegis of the Part C Research Agenda, findings

from the SBIF study are expected to inform practice, thus resulting in their inclusion in instructional programs for LEP students.

Consortium Formed to Conduct the Study

The study was conducted by a consortium of nine educational institutions and agencies, collaborating with school districts that serve ethnolinguistically diverse student populations. Consortium members, participating school districts, and targeted ethnolinguistic populations included in both parts of the study were:

- ARC Associates, Inc., in collaboration with the Oakland and San Francisco school districts, California, focusing on students whose home language is one of the Chinese languages--Sau-Lim Tsang, principal investigator.

- Far West Laboratory for Educational Research and Development, in collaboration with the San Francisco Unified School District, California, focusing on multilingual classrooms with students representing many home languages--Joaquin Armendariz, principal investigator.

- Florida State University, in collaboration with the Dade County Public Schools in Miami, Florida, focusing on Cuban and Cuban-American students whose home language is Spanish--Roger Kaufman, principal investigator.

- Hunter College of the City University of New York, in collaboration with Community School District 4, New York City, focusing on Puerto Rican students whose home language is Spanish--Jose A. Vazquez-Faria, principal investigator.

- Navajo Nation Division of Education in collaboration with schools serving the Navajo Nation in northeastern Arizona--Gail Goodman, principal investigator.

- Southwest Educational Development Laboratory, in collaboration with El Paso Public Schools, El Paso, Texas, focusing on Mexican and Mexican-American students whose home language is Spanish--Domingo Dominguez, principal investigator.

Consortium members and school districts participating in Part II only of the study were:

- CEMREL, Inc., in collaboration with the Chicago Public Schools, Illinois, focusing on classrooms in which the home language of many students is Spanish--Harriet Doss-Willis, principal investigator.

- Northwest Regional Education Laboratory, in collaboration with the Salem, Oregon, public schools, focusing

on students whose home language is either Vietnamese or Spanish--Alfredo Aragon, principal investigator.

- University of Hawaii, in collaboration with the Hawaii Department of Education, focusing on Filipino students whose home language is Ilokano--Morris Lai, principal investigator.

Description of the Study

As stated earlier, the study was designed in two phases. Part I identified and described features of bilingual instruction considered to be significant in terms of their consequences for students of limited English proficiency. This part of the study involved 232 target students in 58 classrooms at six nationally representative sites. Part II of the study focused on verification of the features and consequences identified during Part I. This second phase of the study included 356 target students in 89 classrooms at eight sites. Both parts of the study are described below.

Part I of the Study

Although it was not required by the RFP, schools and classrooms identified as successful bilingual instructional settings served as the focus of the study. In its proposal, the consortium argued that significant bilingual instructional features are more likely to be found in such settings. Thus, the 58 classrooms in the Part I sample were nominated by constituents at their respective sites to be among the most successful bilingual instructional settings in the participating school districts.

In its first year, the study addressed research questions related to six sets of research constructs. These appear in Table i, along with questions addressed and data sources tapped for information.

While the majority of data sources for the study were contained within the classrooms, two additional sources of information were also considered important. Both were located outside the immediate vicinity of the classroom, although they impinge upon and influence both instructional activites and their eventual impact or consequences for students of limited English proficiency. These are (a) what constituents of bilingual education--e.g., parents, teachers, students, administrators--consider indicators of success in bilingual instruction and what these mean for LEPs; and (b) what constitutes the macro-level context variables that further define and describe the school, district, and community in which the bilingual instructional settings in the study are located.

Table 1

Constructs, Research Questions, and Data Sources for Part I of the SBIF Study

CONSTRUCTS	RESEARCH QUESTIONS	DATA RESOURCES
Indicators of successful bilingual instructional settings	What features/criteria do various experts among bilingual education constituent groups use in determining that a bilingual instructional setting (school and classroom) is successful? Constituent groups are: bilingual education program directors, principals, teachers, parents, etc. Are success indicators similar or different based on client groups, ethnolinguistic composition of language minority student population, site, level of education (elementary/school, junior high school, senior high school), and school classroom?	Open ended interviews with representatives of various client groups at each of six proposed Part I sites. Bilingual education classroom evidencing success criteria
Macro-level context data	What is the school, community, bilingual education program, and family context within which each of the sample classrooms is nested? What, if any, similarities/differences in the macro-level context exists across sites and classrooms?	Open-ended interviews with school principals, parents, others, at the classroom site. Review of available documents and program plans. Informal observations in community. Project director and data collector knowledge of community
Organizational structure of the classroom	(For each activity structure dimension) what forms are utilized in classrooms in bilingual schooling settings? Do differences on one dimension, e.g., language of instruction, interact with/appear to be related to differences in other dimensions, e.g., student choice?	Narrative descriptions based on in-class observations. General descriptive data obtained during in-class observation.
Allocation of Time	How is time allocated in exemplary bilingual schooling settings by content area, language of instruction, student language characteristics, resources, and category of teaching-learning activity? Does allocation of time differ according to configuration of macro-context levels?	In-class observations using stopwatch and coding sheet.
Teacher Variables	Which, if any, active teaching behaviors do teachers in successful bilingual schooling settings use when teaching reading and math?	Active teaching observation instruments.
	What expectations do teachers in bilingual settings have for Language Minority Students and students who speak the majority language What, if any, similarities/differences in expectations occur across teachers based on teacher's mother tongue, years of teaching in a bilingual education program, professional development related to instruction of Language Minority Students? What sense of efficacy is expressed by teachers? Does efficacy appear to be related to teacher's mother tongue, etc.? (see above) In teacher's opinion, what is intent of instruction? Is intent similar/different depending upon student language, age, subject area?	Curriculum interviews.
	What patterns of interaction, in general, occur between teachers and students in bilingual schooling settings? What work activity and institutional demands are imposed by teachers in the classroom? Are these related to student's ethnolinguistic background, teacher's intent, sense of efficacy, expectations for students? What relationships exist, if any between teacher intent and what the teacher does during instruction?	Narrative description of teacher behavior.
Student Variables	What is the language proficiency in L1 and L2 of the Language Minority Students in each classroom, based on teacher ratings and other data sources?	Teacher ratings of language proficiency; other already available proficiency data.
	What is the Academic Learning Time of Language Minority Students in bilingual instructional settings, by classroom, site, and across site?	Academic Learning Time data. Descriptive narratives of student participation in the classroom.
	What social cognitive understandings do Language Minority Students express regarding instructional demands, teacher authority, distributive justice in application of classroom resources and specific work activity demands?	Social cognitive understanding interviews.
	How do Language Minority Students participate in classroom instructional activities? Is one style of participation more productive for some students than others? What, if any, relationships exist between the Language Minority Student's proficiency, ALT, participation style(s), and/or social cognitive understandings?	Narrative description of student behavior in the classroom. Participation style analysis.

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From January through June of the 1980-81 school year, classroom data for Part I of the study were collected. There were two levels of data collection activites. The first (Level 1) involved the collection of several kinds of data from the sample classrooms at each of the consortium sites. At the second (Level 2), one or two classrooms were studied intensively at each site in order to produce an ecological case study for each.

Level 1 data collection. For the 58 classrooms of the study sample, four sets of constructs were included in the Level 1 data collection. These were: (a) organizational structure of the classroom in terms of language of instruction, content (subject), work group size and composition, degree and nature of cooperation/collaboration among students, student choice options, nature and mode of teacher's evaluation of student work, and interdependency of these factors for work completion; (b) allocation of time by content, by language of instruction (L1 or L2) and by who is instructing (teacher or other adult), to use of instructional materials in L1 and L2, to LEP students and to others, and among different instructional activities; (c) teacher variables in terms of active teaching, teachers' expectations and sense of efficacy; and (d) student variables in terms of language proficiency, participation in classroom learning activities, academic achievement with emphasis on academic learning time for reading/language arts and mathematics instruction, and social cognitive understanding of students.

Level 2 data collection. The second level of the Part I study resulted in nine intensive, ecological case studies of bilingual instruction. These case studies were designed to obtain richer, more detailed information for nine of the classrooms included in the first level of data collection for Part I. The nine classrooms included two kindergarten classes, one first grade class, one combination grades one-two class, one second grade class, one combination grades two-three class, one combination grades three-four-five class, and two fifth grade classes.

Data were collected in the following sequence: (a) a teacher interview was conducted to determine instructional goals and how the classroom operates as an instructional-social system, as well as to describe a student who functions successfully in this system; (b) then, for each of three or four instructional events, (1) an interview was conducted with the teacher to determine the intent of instruction for that event; (2) observation of instruction followed, focusing concurrently on the teacher and on the four target students; (3) a debriefing interview was conducted with the teacher, to learn if instruction had proceeded as intended and if, in his/her opinion, target students had "learned" what was intended; and (4) debriefing interviews were conducted with target students to determine what they believed they were being asked to do, if they felt they had been successful at completing tasks and how they knew this, and their social cognitive understandings of how the classroom instructional-social system operates.

Table ii provides a list of documents and reports emerging from Part I of the SBIF study.

Table ii

Research Documents and Reports for SBIF Study: Part I

Document/Report Number	Title
SBIF-80-D.1	Description of the Study
SBIF-80-D.2	Research Design: Part I of the SBIF Study
SBIF-80-D.1.1	Overview of the SBIF Study
SBIF-81-D.1.1	Review of the Literature for a Descriptive Study of Significant Bilingual Instructional Features
SBIF-81-D.3	Sample Description and Data Gathering Schedules: Part I of the SBIF Study
SBIF-81-R.4	Preliminary Analysis of Part I of the SBIF Study
SBIF-81-D.6	Criteria to Select Instructional Features and Consequences for Limited English Language Proficient Students for Part II of the SBIF Study
SBIF-81-D.7	Research Design: Part II of the SBIF Study
SBIF-81-D.7.1	Accommodation of the Seminar of Scholars' Recommendations for the Part II Research Design
SBIF-81-R.7	Executive Summary of Part I of the SBIF Study
SBIF-81-R.6-I	Volume I: Introduction and Overview of Part I of the Study
SBIF-81-R.5/ R.6-II	Volume II: Success Indicators and Consequences for Limited English Language Proficient Students in the SBIF Study
SBIF-81-R.2/ R.6-III.1	Volume III.1: Bilingual Instructional Perspectives: Organization of Bilingual Instruction in the Classrooms of the SBIF Study
SBIF-81-R.3/ R.6-III.2	Volume III.2: Bilingual Instructional Perspectives: Allocation of Time in the Classrooms of the SBIF Study

Table ii (continued)

Research Documents and Reports for SBIF Study: Part I

Document/Report Number	Title
SBIF-81-R.6-IV	Volume IV: Teaching in Successful Bilingual Instructional Settings
SBIF-81-R.6-V	Volume V: Consequences for Students in Successful Bilingual Instructional Settings
SBIF-81-R.6-I-A.1	Appendix A.1: Macro-level Context Report: Site 01
SBIF-81-R.6-I-A.2	Appendix A.2: Macro-level Context Report: Site 02
SBIF-81-R.6-I-A.3	Appendix A.3: Macro-level Context Report: Site 03
SBIF-81-R.6-I-A.4	Appendix A.4: Macro-level Context Report: Site 04
SBIF-81-R.6-I-A.5	Appendix A.5: Macro-level Context Report: Site 05
SBIF-81-R.6-I-A.6	Appendix A.6: Macro-level Context Report: Site 06
SBIF-81-R.5/R.6-VI-B.1	Appendix B.1: An Ecological Case Study of Bilingual Instruction (English/Spanish) in Kindergarten: Site 01
SBIF-81-R.5/R.6-VI-B.2	Appendix B.2: An Ecological Case Study of Bilingual Instruction (English/Spanish) in Combined Grades 1 & 2: Site 01
SBIF-81-R.5/R.6-VI-B.3	Appendix B.3: An Ecological Case Study of Bilingual Instruction (English/Spanish) in Combined Grades 2 & 3: Site 02
SBIF-81-R.5/R.6-VI-B.4	Appendix B.4: An Ecological Case Study of Bilingual Instruction (English/Spanish) Grade 2: Site 03
SBIF-81-R.5/R.6-VI-B.5	Appendix B.5: An Ecological Case Study of Bilingual Instruction (English/Navajo) in Grade 1: Site 04
SBIF-81-R.5/R.6-VI-B.6	Appendix B.6: An Ecological Case Study of Bilingual Instruction (English/Cantonese) in Grade 5: Site 05

Table ii (continued)

Research Documents and Reports for SBIF Study: Part I

Document/Report Number	Title
SBIF-81-R.5/ R.6-VI-B.7	Appendix B.7: An Ecological Case Study of Bilingual Instruction (English/ Cantonese) in Grade 5: Site 05
SBIF-81-R.5/ R.6-VI-B.8	Appendix B.8: An Ecological Case Study of Bilingual Instruction (English/Spanish) in Grade 1: Site 06
SBIF-81-R.5/ R.6-VI-B.9	Appendix B.9: An Ecological Case Study of Bilingual Instruction (English/Spanish) in Combined Grades 3, 4, & 5: Site 06
SBIF-81-R.6-C	Training Manual for Data Collection: SBIF Study
SBIF-81-R.8	State-of-the-Project Report: SBIF Study

Part II of the Study

Information from Part I data analysis provided the basis for Part II of the study. Part II has been carried out during the second and third years of funding (1981-82 and 1982-83 school years). It is intended to verify the findings from Part I. The verification activities include:

- o Verification of aspects of instruction identified in the Part I study classrooms in other ethnolinguistic bilingual instructional settings. To accomplish this, inquiry was focused on new classrooms added to the sample at three consortium sites (CEMREL, University of Hawaii, and Northwest Regional Educational Laboratory) as well as new classrooms at Part I sites (Study I-A/B).

- o Stability of the instructional system and process across two academic years. To accomplish this, ten teachers from the Part I classrooms observed during the 1980-81 school year were studied with a new group of students in Part II during the 1981-82 school year (Study II-A). Stability in terms of LEP students' participation in bilingual instruction was also studied. In doing so, 86 students observed in Part I were followed into their new classrooms in the 1981-82 school year (Study II-B).

- o Utility from both research and program improvement perspectives.

To accomplish this, teachers from four of the Part I study classrooms were asked to select, from among the variety of significant bilingual instructional features identified in Part I, those they considered most useful in instructing LEP students (Study III).

- o Compatibility of Part I findings with those of related research--e.g., research on teaching per se, bilingual education research, successful schools research, research in related academic disciplines, and other research sponsored by the Part C Coordinating Committee. To accomplish this, Part I findings were addressed by recognized researchers in the above areas. They prepared analytical papers comparing their data with Part I findings, these were the focus of a national working meeting held in February 1983 (Study IV).

Table iii presents the list of reports associated with Part II of the SBIF study.

Table iii

Research Documents and Reports for SBIF Study: Part II

Document/Report Number	Title
SBIF-83-R.11	Site and Sample Descriptions SBIF Study: Part II
SBIF-83-R.12	Verification of Bilingual Instructional Features
SBIF-83-R.13	Stability of Instructional System and Process for a Sample of Ten Bilingual Teachers in the SBIF Study
SBIF-83-R.13.1	Stability of Instructional System and Process for a Sample of Eighty-Five Students in the SBIF Study
SBIF-83-R.15/16	Utility of the SBIF Features for the Instruction of LEP Students
SBIF-83-R.9/10	Compatibility of the SBIF Features with Other Research on Instruction for LEP Students
SBIF-83-R.14	Executive Summary: Part II of the SBIF Study

This particular volume describes two aspects of the SBIF study's verification activities: (a) the verification of Part I findings in classrooms nominated as successful bilingual instructional settings but serving different ethnolinguistic groups than did the Part I sites (Substudy I-A), and (b) the verification of Part I findings in classroom serving LEP students but that were not nominated as "successful" (Substudy I-B).

Data were obtained through a variety of qualitative and quantitative procedures and provided information on organization of instruction, allocation of time, active teaching, academic learning time, and student participation styles in the samples of classes.

Charles W. Fisher
Principal Investigator
September 1983

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The National Consortium for the Significant Bilingual Instructional Features Study would like to acknowledge the contributions of the thousands of students and hundreds of classroom teachers who participated in the study. The dedication of the staffs at the nine consortium sites, and the sustained cooperation of district administrators and school principals were critical to the achievement of study goals. Approximately 100 data collectors representing five different language groups were involved in the fieldwork. The study was thoughtfully advised on research and policy issues by a Seminar of Scholars and a Policy Implications Advisory Panel. The talent, energy, and perseverance of all of these contributors is deeply appreciated.

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Table of Contents

	Page
ABSTRACT	iii
PREFACE	v
ACKNOWLEDGMENT	xv
CHAPTER ONE: INTRODUCTION	1
The Research Constructs	2
Organizational Structure of the Classroom	2
Allocation of Time	2
Active Teaching	3
Academic Learning Time	5
Student Participation Types	6
CHAPTER TWO: METHODOLOGY FOR SUBSTUDY I-A	7
Description of the Sample	7
Sample Selection Process	7
Characteristics of Class Sample	8
Date Sources	10
Classroom Context Variables	10
Instructional Process Variables	12
Student Variables	13
Analysis Procedures	15
CHAPTER THREE: RESULTS OF SUBSTUDY I-A	17
Organization of Bilingual Instruction	17
Site 7	17
Site 9	40
Time Allocation	46
Site 7	46
Site 9	58
Active Teaching	68
Summary	72
Academic Learning Time	73
Summary	79
Student Instructional Participation Characteristics	79
CHAPTER FOUR: METHODOLOGY FOR SUBSTUDY I-B	87
Description of the Sample	87
Sample Selection Process	87
Characteristics of Class Sample	88

Table of Contents (continued)

Page

Data Sources 96
Classroom Context Variables. 97
Instructional Process Variables. 97
Student Variables. 97
Analysis Procedures 98

CHAPTER FIVE: RESULTS OF SUBSTUDY I-B 101

Site-level Comparisons. 101
Site 1: New York. 102
Site 2: Florida 105
Site 3: Texas 105
Site 4: Arizona 109
Site 5: Oakland/San Francisco 109
Site 8: Oregon. 114
Description of Substudy I-B Classes Based on Proportion of L1 Use During Basic Skills Instruction 117

CHAPTER SIX: SUMMARY 123

Verification Substudy I-A 123
Sample 123
Organization of Instruction. 124
Allocation of Time 125
Active Teaching. 126
Student Participation Types. 127
Discussion 128
Verification Substudy I-B 129
Sample 129
Within-Site Analysis 130
Proportion of L1 Used 131
Discussion 132

REFERENCES 137

List of Tables

Table		Page
i	Constructs, Research Questions, and Data Sources for Part I of the SBIF Study	viii
ii	Research Documents and Reports for SBIF Study: Part I	x
iii	Research Documents and Reports for SBIF Study: Part II	xiii
2.0	Nominal Class Size, Sex, and Oral English and L1 Language Proficiency of Students: Site 7	9
2.1	Nominal Class Size, Sex, and Oral English and L1 Language Proficiency of Students: Site 9	11
2.2	Frequency of Observations and Ratings of Active Teaching Behaviors: Part II of the SBIF Study	13
3.0	Average Daily Time and Percent of School Day for 15 Components of Activity Structure: Site 7	18
3.1	Daily Time Spent in Frequently Occurring Instructional Activity Substructures by Class: Site 7	24
3.2	Oral Language Use by Student, Teacher, and Teacher Aide in Frequently Occurring Instructional Activity Substructures by Class: Site 7	29
3.3	Average Daily Time and Percent of School Day for 15 Components of Activity Structure: Site 9	41
3.4	Allocation of Instructional Time to Subject Matter Content (by Class): Site 7	47
3.5	Language of Materials Used by Instructor During Basic Skills Instruction: Site 7	49
3.6	Allocation of Instructor Time to Student Groups During Basic Skills Instruction: Site 7	51
3.7	Instructor's Oral Language Use During Basic Skills Instruction: Site 7	52
3.8	Frequency of Instructor's Language Changes During Basic Skills Instruction: Site 7	54

List of Tables (continued)

Table		Page
3.9	Frequency Distribution for Content of Instructor's First Statement After Oral Language Change During Basic Skills Instruction: Site 7	56
3.10	Frequency Distribution for Person or Persons to Whom the Instructor's First Statement After a Language Change Was Directed During Basic Skills Instruction: Site 7	57
3.11	Allocation of Instructional Time to Subject Matter Content (by Class): Site 9.	59
3.12	Language of Materials Used by Instructor During Basic Skills Instruction: Site 9.	61
3.13	Allocation of Instructor Time to Student Groups During Basic Skills Instruction: Site 9	62
3.14	Instructor's Oral Language Use During Basic Skills Instruction: Site 9	64
3.15	Frequency of Instructor's Language Changes During Basic Skills Instruction: Site 9.	66
3.16	Frequency Distribution for Content of Instructor's First Statement After Oral Language Change During Basic Skills Instruction: Site 9.	67
3.17	Frequency Distribution for Person or Persons to Whom the Instructor's First Statement After a Language Change Was Directed During Basic Skills Instruction: Site 9	69
3.18	Observer Ratings of Teacher Behavior: Part II of the SBIF Study	71
3.19	Content, Degree of Contact, and Academic Learning Time for Target Students at Site 7: Part II of the SBIF Study.	76
3.20	Content, Degree of Contact, and Academic Learning Time for Target Students at Site 9: Part II of the SBIF Study.	77
3.21	Frequencies of SIPC Categories: Site 7, Time 1	80
3.22	Frequencies of SIPC Categories: Site 9, Time 1	82
3.23	Frequencies of SIPC Categories for Target Students: Site 9, Time 1.	83

List of Tables (continued)

Table		Page
3.24	Frequencies of SIPC Categories for Target Students: Site 9, Time 2.	84
4.0	Nominal Class Size, Sex, and Oral English and L1 Language Proficiency of I-B Student Sample	89
5.0	Classroom Context, Instructional Process, and Student Variables for Part I and Part II Classes at Site 1	103
5.1	Categorization of Students by Participation Type at Two Points in Time from Part I and Part II: Site 1.	104
5.2	Classroom Context, Instructional Process, and Student Variables for Part I and Part II Classes at Site 2	106
5.3	Categorization of Students by Participation Type at Two Points in Time from Part I and Part II: Site 2.	107
5.4	Classroom Context, Instructional Process, and Student Variables for Part I and Part II Classes at Site 3	108
5.5	Categorization of Students by Participation Type at Two Points in Time from Part I and Part II: Site 3.	110
5.6	Classroom Context, Instructional Process, and Student Variables for Part I and Part II Classes at Site 4	111
5.7	Categorization of Students by Participation Type at Two Points in Time from Part I and Part II: Site 4.	112
5.8	Classroom Context, Instructional Process, and Student Variables for Part I and Part II Classes at Site 5	113
5.9	Categorization of Students by Participation Type at Two Points in Time from Part I and Part II: Site 5.	115
5.10	Classroom Context, Instructional Process, and Student Variables for Part II Classes at Site 8	116

List of Tables (continued)

Table		Page
5.11	Categorization of Students by Participation Type at Two Points in Time from Part II: Site 8	118
5.12	Classroom Context, Instructional Process, and Student Variables for Classes Based on Proportion of L1 Use in Basic Skills	119
5.13	Index of Selected Instructional Processes in Classes Using Different Proportions of L1	120

List of Figures

Figure		Page
1	Academic learning time for target students at Site 7.	74
2	Academic learning time for target students at Site 9.	75
3	Student participation at Site 9	85

CHAPTER ONE

INTRODUCTION

During Part I of the Significant Bilingual Instructional Features (SBIF) study, extensive data were collected in 58 classrooms serving limited English proficient (LEP) students at six ethnolinguistically different sites. Analyses of these descriptive data yielded a set of five instructional features that characterized teaching in this sample of bilingual education classes. The sample of classes had been identified using a nomination process. Parents, bilingual program administrators, and/or bilingual teachers at each site nominated classrooms where, in their opinion, successful implementation of bilingual education was taking place. This process generated a relatively broad pool of classrooms and the 58 classes in the Part I sample were selected from the pool (see Sample Description and Data Gathering Schedules: Part I of the SBIF Study, document SBIF-81-D.3).

The five features that describe bilingual instruction in the Part I classes are (a) congruence of instructional intent, organization and delivery of instruction, and student consequences, (b) use of active teaching behaviors, (c) use of the students' native language (L1) and English (L2) for instruction, (d) integration of English language development with basic skills instruction, and (e) use of information from the LEP students' home culture (see Executive Summary of Part I of the SBIF Study, document SBIF-81-R.7).

The overall purpose of Part II of the SBIF study was to examine these features in terms of their verifiability, stability, utility and compatibility. This document addresses the verifiability issue. Two questions guided this portion of the research.

First, would the features identified in Part I also characterize bilingual instruction in a sample of classes serving different ethnolinguistic groups than those examined in Part I? In other words, how replicable were the features for different ethnolinguistic populations? This first question was explored by examining data collected at two new sites where the sample of classrooms was identified in the manner used in Part I of the study (Verification Substudy I-A).

Second, would the features identified in Part I also characterize instruction received by LEP students generally? That is, would the same features be identified in a sample of classes that were not selected using the nomination procedure and that did not necessarily implement bilingual instruction? This second question was explored by examining data collected in new classes at five of the six Part I sites and one new site (Verification Substudy I-B).

The remainder of this chapter describes the research constructs used in the verification activities of the SBIF study. Chapter Two presents the methodology for Verification Substudy I-A while Chapter Three reports Substudy I-A results. Chapter Four describes the methodology for Verification Substudy I-B, Chapter Five presents Substudy I-B results, and Chapter Six summarizes both substudies.

The Research Constructs

The constructs used in exploring the verification questions for Substudies I-A and I-B are identical. Thus the following discussion of the constructs is applicable to both substudies. The five research constructs were: organization of instruction, time allocation, active teaching, academic learning time, and student participation styles.

Organizational Structure of the Classroom

There are nine major dimensions of activity structures that were used for analyzing bilingual instructional organization for Part I of the SBIF descriptive study. These are: (a) the content of subject focus for the instructional activity; (b) the number of instructional groups, their size, and basis for their membership; (c) the nature of task assignment; (d) the nature of oral language use by teacher, teacher aide, and students; (e) the number of adults present; (f) the division of labor for task completion; (g) the product options for students; (h) task completion dependency; and (i) the nature and focus of evaluation by the teacher.

For bilingual instruction, the impact of organization of instruction is particularly important to understand. For example, if a LEP student is unable to comprehend enough English to obtain access to understanding task and institutional demands, it is unlikely that (s)he will be able to respond appropriately and, therefore, learn what is intended by the teacher. Successful bilingual teachers provide a variety of instructional arrangements to ensure access to participation in instructional activity by LEP students. The major purpose of this research construct was to provide descriptions of how bilingual instruction was organized in the classes of the study. (For background information on organization of instruction and technical information on the observation procedures see Bilingual Instructional Perspectives: Organization of Bilingual Instruction in the Classrooms of the SBIF Study, document SBIF-81-R.2/R.6-III.I.)

Allocation of Time

In the SBIF descriptive study, interest in time allocation extended to many aspects of classroom instruction. In this report,

descriptive data on time allocation are presented in four areas: subject matter content; language of materials; instructor's time with the whole group, subgroup, or individuals; and instructor's use of L1 and L2. First, data are presented on allocation of time to subject content, reflecting the average daily amounts of time allocated to subject matter areas. Second, information is presented on the time allocated by instructors to materials with specified language characteristics. That is, how often did instructors use materials that were in L1, in L2, or that were bilingual? Third, descriptive data are presented on the amount of time instructors allocated to working with the entire class, subgroups of students, or individual students. Fourth, data are presented on the allocation of instructors' time to L1 and L2. That is, how much time did instructors in bilingual instructional settings spend speaking L1 compared to L2? How often do instructors change from one language to another during basic skills instruction and why did instructors change from one language to another? These are the foci of the time allocation information presented in this report. (For background information on allocation of time and technical information on the observation procedure see Bilingual Instructional Perspectives: Allocation of Time in the Classrooms of the SBIF Study, document SBIF-81-R.3/R.6-III.2).

Active Teaching

Recent research, conducted mostly in basic skills in elementary schools, has consistently shown that certain instructional characteristics are associated with student scores on reading, language arts, and mathematics achievement tests (see, for example, Stallings & Kaskowitz, 1974; Soar & Soar, 1972; McDonald & Elias, 1976; Tikunoff, Berliner & Rist, 1975; Brophy & Evertson, 1974, 1976; Fisher, Filby, Marliave, Cahen, Dishaw, Moore, & Berliner, 1978; and Good & Grouws, 1975). No simple statement regarding these characteristics is possible, but recent reviews (Good, 1979; Rosenshine, 1979; Brophy, 1979) have integrated the characteristics by describing active teaching or direct instruction.

The following generalizations about teaching have been made based on this body of teaching effectiveness research.

(1) Teachers make a difference.

(2) There appear to be no generic teaching skills. The context of the instructional setting (who is in the setting, what is to be taught and learned, and materials) appears to influence both the form and effects of teaching behaviors.

(3) When data are integrated at a higher level of generality, several clusters or patterns of teacher behavior

are consistently related to learning gains for students as measured by academic achievement tests.

(4) Teacher expectations and role definition, particularly as role relates to efficacy, are important. Teachers who expect students to learn and who expect to be able to teach them are more successful, as measured by student achievement gains, than those who do not.

(5) Effective teachers know how to organize and maintain a classroom learning environment so that relatively little time is lost in transitions, disciplinary actions, and so forth.

(6) Active teaching, or direct instruction, in which the teacher sets and articulates learning goals, actively assesses student progress, and frequently makes class presentations illustrating how to do assigned work results in above average achievement gains for students in reading and mathematics.

Undoubtedly, these findings suggest teacher variables that may constitute significant instructional features in bilingual settings. However, in making this assumption, it is important to remember that the above relationships between teacher actions and student consequences have been established only in the basic skills areas and primarily at the elementary level.

The basic components of active teaching were outlined by Brophy (1979):

> In summary, learning gains are most impressive in classrooms in which students receive a great deal of instruction from and have a great deal of interaction with the teacher, especially in public lessons and recitations that are briskly paced but conducted at a difficulty level that allows consistent success. (p. 747)

Rosenshine (1979) suggested that some of the following teaching acts were critical aspects of direct instruction: (a) a clear focus on academic goals, (b) an effort to promote extensive content coverage and high levels of student involvement in classroom tasks, (c) active monitoring of student progress toward instructional goals, (d) structured learning activities and feedback that is immediate and academically oriented, and (e) an environment that is task oriented but relaxed.

The concept of active teaching is applicable to core subjects (e.g., mathematics and reading) in elementary schools when achievement goals are of primary interest. Recent research in secondary schools has illustrated the general utility of this concept at this level. For example, Stallings, Needles, and Stayrook (1979) demonstrated that the general principles of active teaching applied to the improvement of reading in secondary schools (a product goal).

Evertson, Anderson, and Brophy (1978) in a correlational study found that the construct of active teaching made sense (if achievement was defined as product-oriented) in junior high mathematics classrooms. Similarly, Good and Grouws in an ongoing project have produced support for the active teaching model in a field experiment in eighth grade mathematics classrooms.

The active teaching concept was used to generate a series of 5-point rating scales that, taken together, assessed the major elements of active teaching as described in the literature. These ratings were intended to describe the use of active teaching behaviors by the sample of teachers who participated in the SBIF study. (For background information on active teaching behaviors and the rating procedures see Teaching in Successful Bilingual Instructional Settings, document SBIF-81-R.6-IV.)

Academic Learning Time

Academic learning time (ALT) is a measure of student learning-as-it-occurs. It is based on the premise that in order to examine the impact of classroom practices on student learning, it is necessary to secure a measure of student learning that can be related directly to classroom phenomena.

Although achievement scores are an important index of student learning, they have several drawbacks when used to identify the impact of classroom practices on student learning. Some of these characteristics are: (a) achievement scores are usually influenced by many factors other than school instruction; (b) measuring achievement is intrusive to the process of instruction; (c) repeated achievement test measurements cannot be conveniently made over a short period of time; and (d) achievement tests are often sensitive to minor format and content differences in instruction. Many of these difficulties can be overcome by using ALT as an alternative measure of student learning. Recent research (Fisher et al., 1978) has shown that academic learning time as a measure of student learning is more proximal to instruction than achievement scores, can be observed during instruction, can be measured repeatedly, and is positively related to student achievement.

Academic learning time is defined as the time a student spends in a particular content area, engaged in learning tasks with a high degree of accuracy. The basic components of academic learning time, then, are allocated time, student engagement, and percent time on high accuracy tasks. The definition requires that these three conditions exist simultaneously before a student can accumulate academic learning time. First, instructional time is allocated to the content area of interest (say, mathematics). Second, the student is engaged in a learning task. Third, the learning task is chosen so that the student's responses are correct or accurate most of the time. The more ALT accumulated by a student by instruction, the more the student is learning.

The question pursued for this aspect of the substudies was: What is the academic learning time of LEP students in successful bilingual instructional settings, by classroom, by site, and across sites? (For further information on academic learning time see Consequences for Students in Successful Bilingual Instructional Settings, document SBIF-81-R.6-V.)

Student Participation Types

In order for students to acquire basic skills in school, they must be able to participate competently in the learning tasks assigned to them. Since classrooms typically include 30 students, a teacher, and possibly other adults, competent participation requires that students learn to behave in ways that not only facilitate completion of tasks, but also support interaction with the other members of the classroom group. Classroom instructional activity requires frequent interaction with others, so that students tend to develop patterns of responses to instructional demands during classroom activities. Based on prior research and classroom observations, Ward (1982) categorized student participation patterns into six types. These were utilized for the SBIF descriptive study, and are described further in Chapters Two and Four.

Classification of students by participation type was based on ratings completed by teachers at the beginning of the school year. Students were rated on 21 student behaviors associated with student participation. These behaviors were clustered into the six participation style categories. For a more complete description of this categorization process, see Guthrie, Ward, Tikunoff, & Mergendoller (1982). (Background information on student participation types and on the participation of students in the SBIF study is contained in Consequences for Students in Successful Bilingual Instructional Settings, document SBIF-81-R.6-V.)

CHAPTER TWO

METHODOLOGY FOR SUBSTUDY I-A

The question studied for Verification Substudy I-A was whether the features identified as significant in Part I of the SBIF study would characterize bilingual instruction for other ethnolinguistic groups. This chapter describes the methodology used in Substudy I-A, and is divided into three sections. The first is a description of the overall sample for the study. The second section provides information on the data sources for the study, and the third is a description of the analysis procedures followed in the study.

Description of the Sample

This section describes the teacher and student samples for Substudy I-A including (a) a description of the sample selection process, and (b) characteristics of the sample classes.

Sample Selection Process

The sample selection process was conducted at the site, class, and target student level. The steps taken in each are described below.

Site. For Substudy I-A, instruction was examined in a sample of settings and classrooms nominated as successful. The nomination procedure was parallel to that used in Part I of the SBIF study. Site selection was based on various criteria. Among the factors considered were the following: variety of ethnolinguistic groups, geographic distribution variability in program characteristics (both in L1 and L2), and amount of bilingual education program experience. For a detailed discussion of each of these factors and selection guidelines for the study sites, see Sample Description and Data Gathering Schedules: Part I of the SBIF Study (document SBIF-81-D.3). The two sites included in Substudy I-A were Chicago (where there were Spanish-speaking students with Mexican American, Puerto Rican or Cuban backgrounds) and Hawaii (where there were Ilokano-speaking students with Filipino backgrounds). These sites participated in the Part II data collection only, even though the sites were selected at the beginning of the SBIF study.

Class. Within each site, classrooms were selected by using (a) subjective criteria applied in a nomination interview procedure, and (b) objective criteria drawn from among characteristics usually present in bilingual education programs. A total of 21 classes were identified, 10 at Chicago and 11 at Hawaii.

Target students. For Substudy I-A, four target students were selected from each of 21 classrooms on the basis of three criteria: oral English proficiency (OEP), sex, and instructional participation style. Information on these criteria was obtained from the participating teachers, who were asked to rate the OEP of each of their students on a scale of 1 to 4, with 4 representing the highest level of proficiency (Fuentes & Weisenbaker, 1979). They also rated students' participation using a form that described 21 participation characteristics, which were grouped by researchers into six participation style categories.

The goal of the student selection process was to obtain from each class: (a) two students who were rated at English language proficiency Levels 1 or 2 and two students at Level 3; (b) a balance of males and females; and (c) students who represented different participation styles. If during target student selection there was a conflict among the three selection criteria, the selection was made based on the priority of the criteria. English language proficiency was considered most important, sex was second, and instructional participation style was third. Thus, if there were only boys in a particular class with English proficiency Level 1 or Level 2, then more boys than girls were chosen from that class. Similarly, if the available range of participation types would have prohibited an equal sample of boys and girls, then the balance on sexes was maintained.

Characteristics of Class Sample

Site 7. Data in Table 2.0 include grade level, class size, number of students by sex, and number of students for each of the four oral language proficiency levels in both English and L1. To obtain the language ratings, teachers rated each of their students on a four-point scale of oral language proficiency (after Fuentes & Weisenbaker, 1979). The four levels are:

Level 1: Student neither speaks nor understands the language;

Level 2: Student understands some fundamental language;

Level 3: Student speaks and understands fundamental language sufficiently to participate in elementary conversations; and

Level 4: Student has reasonable command of the language.

Ratings on oral proficiency in English and L1 were collected for each student in each class. The rating for the student's home language (L1) is shown in parentheses in Table 2.0.

For example, Class 1 was a kindergarten class containing 29 students, 12 of whom were boys and 17 of whom were girls. Of these 29

Table 2.0

Nominal Class Size, Sex, and Oral English and L1 Language Proficiency of Students: Site 7

Class	Grade Level	Nominal Class Size	Sex		Oral English (and L1) Proficiency			
			Male	Female	Level 1	Level 2	Level 3	Level 4
1	K	29	12	17	21 (-)	5 (-)	3 (-)	0 (-)
2	2	24	14	10	4 (0)	13 (7)	7 (17)	0 (0)
3	3-4	17	9	8	0 (-)	0 (-)	0 (-)	17 (-)
4	6-7	16	8	8	3 (1)	5 (0)	1 (2)	3 (8)
5	K	25	12	13	22 (0)	3 (0)	0 (0)	0 (25)
6	1	15	5	10	5 (0)	5 (0)	5 (0)	0 (15)
7	3-5	26	15	11	7 (1)	2 (1)	16 (0)	1 (12)
8	2	21	10	11	1 (0)	7 (0)	9 (12)	4 (21)
9	1	25	11	14	12 (0)	6 (0)	4 (0)	3 (25)
10	3-4	30	12	18	0 (0)	7 (1)	17 (1)	0 (28)
Site Totals		228	108	120	75 (2)	53 (9)	62 ( )	28(134)

Note: Rated oral L1 proficiencies are shown in parentheses.
"-" denotes missing values.

students, 21 were at oral English language proficiency Level 1, 5 at Level 2, 3 at Level 3, and none at Level 4. Thus, most students were in the lower range of oral English language proficiency. This description depicts the context for bilingual instruction and assists in interpreting data that follow, particularly regarding uses of L1 and L2 for instruction. One might expect, for instance, that a class with many students in the lower range of oral English language proficiency (Levels 1 and 2) would require more instructional focus on developing English language skills and the delivery of some instruction in L1, particularly in the academic skills area and for clarifying procedural instructions. Similar descriptions can be developed from Table 1 for each of the other nine classes at Site 7.

Site 9. Information on the classes at Site 9 is presented in Table 2.1.

At Site 9, Class 1 was a combination of grades 1 through 5. It contained 13 students, 7 of whom were boys and 6 of whom were girls. The number of students within each oral English language proficiency level was 4 at Level 1, 4 at Level 2, 5 at Level 3, and none at Level 4. Thus, of the 13 students in this class, most students were found to be in the lower range of oral English language proficiency. As before, this description depicts the context for bilingual instruction and assists in interpreting data that follow, particularly regarding uses of L1 and L2 for instruction. Similar descriptions can be developed from Table 2.1 for each of the other 10 classes at Site 9.

Data Sources

This section describes the data sources used in Substudy I-A. Data were collected on three types of variables: 1) classroom context variables; 2) instructional process variables; and 3) student variables.

Classroom Context Variables

Nine dimensions of classroom content were described through use of the Activity Structures Procedure (ASP) developed for the study: content of subject focus, grouping, task assignment, oral language use, division of labor, product options, student task dependency, and evaluation. Information was collected through direct observation over four days of instruction in each classroom. The ASP required trained observers to code classroom activities at regular intervals three times during the school day. Observers recorded all major shifts in the activity structures of the class, e.g., a change in subject matter focus. (For detailed information on the coding procedures, see Training Manual for Data Collection: SBIF Study, document SBIF-81-R.6-C.)

Table 2.1

Nominal Class Size, Sex, and Oral English and L1 Language Proficiency of Students: Site 9

Class	Grade Level	Nominal Class Size	Sex		Oral English (and L1) Proficiency			
			Male	Female	Level 1	Level 2	Level 3	Level 4
1	1-5	13	7	6	4 (0)	4 (0)	5 (1)	0 (6)
2	5-6	17	6	11	7 (0)	8 (0)	2 (0)	0 (17)
3	2-6	20	13	7	0 (0)	7 (3)	13 (16)	0 (1)
4	1-2	39	21	18	2 (9)	12 (15)	24 (10)	0 (5)
5	5	15	9	6	1 (2)	6 (8)	8 (3)	0 (2)
6	2	21	13	8	0 (0)	5 (13)	16 (8)	0 (0)
7	6	11	9	2	1 (0)	4 (11)	6 (0)	0 (0)
8	1	23	10	13	1 (2)	19 (15)	3 (6)	0 (0)
9	1-4	46	27	19	3 (3)	36 (36)	7 (7)	0 (0)
10	6	10	4	6	0 (0)	2 (3)	5 (5)	3 (2)
11	6	24	14	10	0 (0)	22 (0)	0 (24)	2 (0)
Site Totals		239	133	106	19 (16)	125 (104)	89 (80)	5 (33)

NOTE: Rated oral L1 proficiencies are shown in parentheses.
"-" denotes missing values

Instructional Process Variables

Allocation of time. Data on the amount of teachers' time allocated to subject matter content were obtained from the activity structure procedure described above. Data on teachers' allocation of time to materials, student groups, and oral language use were obtained through direct observation and coding during two full days in each classroom. Trained observers focused their attention on the teacher alone, coding changes (and noting times) in subject content, language of materials, grouping (whole-group, small-group, or individual) and use of the students' first language. Each time the teacher changed languages, whether to L1 or English, the observer noted the time and judged whether the first statement was for the purpose of instructional development, procedures and directions, instructional feedback, or behavioral feedback. This coding process constituted the Time Allocation Procedure (TAP).

The TAP was used to follow the classroom teacher in the sample classrooms. Where students were instructed by other adults outside the classroom as part of pull-out or other programs, no TAP data were collected.

When examining the tables based on TAP data, it is important to keep two facts in mind. First, the TAP focused on the instructor (as opposed to the students) and therefore presents a description of how instructors allocated their time. This picture of the classroom does not necessarily represent allocation from a student's point of view. Second, depending upon the number of pull-out programs or other out-of-class activities (for example, day trips, assemblies, or fire drills), the TAP presents a description of somewhat less than an entire instructional day. In all cases, entries in the tables based on the TAP represent minutes or percent of time observed during basic skills instruction rather than minutes or percent of time per school day. A complete description of the data collection procedures can be found in the Training Manual for Data Collection: SBIF Study, document SBIF-81-R.6-C.

Active teaching. The data on active teaching were derived from observer ratings of 13 teacher behaviors using a five-point scale.

Table 2.2 presents information on the number of instructors at each site, number of rating occasions, and number of raters. After all observation had been completed for a given classroom, the raters met and completed ratings on each of the items for that classroom. Raters discussed those items on which there were differences among the raters and came to a consensus rating for each item.

During the observation periods (a total of 10 person days of observation per class), observers had the opportunity to see each teacher in a variety of instructional settings. As a result, each observer became familiar with the general characteristics of the instruction in each classroom. At the end of the observation period, each observer completed a series of ratings of "active teaching items,"

Table 2.2

Frequency of Observations and Ratings of Active Teaching Behaviors: Part II of the SBIF Study

Site	Number of Instructors	Number of Observation Occasions	Number of Raters
7	10	85	4
9	11	48	3
TOTAL	21	133	7

most of which were based on teaching behaviors found to be associated with student achievement gains in recent research studies on teaching effectiveness.

During training at each site, observers were familiarized with the active teaching items and practiced rating instruction as part of the training procedures held at each of the Part II sites. Of the total of 16 items, 13 were taken from the research on active teaching while the remaining 3 items represented important issues in bilingual instruction but were not part of the teaching effectiveness research. The items may be grouped by content (for example, expectations, classroom management) and are treated by group in the subsequent discussions. Details of the data collection procedure for active teaching are discussed in the Training Manual for Data Collection: SBIF Study, document SBIF-81-R.6-C.

Student Variables

Two types of data were collected on student behavior: academic learning time and instructional participation type.

Academic learning time (ALT). Academic learning time was assessed by directly observing target students during reading, language arts, and mathematics instruction. The ALT observation system calls for the observer to focus on one target student for a moment, code that student's behavior on a series of categories, then focus on a second target student and code that student's behavior. As a result, for any observation period, coding was done about every three minutes for each target student.

Academic learning time data were collected for Sites 7 and 9 by trained observers between January 1982 and May 1982. For Substudy I-A, data for each classroom were collected on four separate occasions within a two-week period. The observation system focused on four target students per class. These students were observed during basic skills instruction of four separate school days. Data were

aggregated over observation occasion and days to provide estimates of the components of academic learning time for each of the target students. Although the target student data can be aggregated to the class level, class estimates obtained in this manner are very difficult to interpret. Since target student selection was based on oral proficiency in English, gender, and student participation type; class estimates derived from the target students are not likely to represent the class average at all well. This point should be kept in mind when interpreting academic learning time data when the data are aggregated above the level of individual students.

During the Part II data collection period, the completed ALT coding sheets were sent approximately weekly from each of the sites to the Far West Laboratory. Newly received sheets were logged in, keypunched, and checked for out-of-range values (and a variety of other logical checks). Calculations were performed resulting in elapsed times for each "line" of coded data. Subsequently, elapsed times were summed over lines for the various observation categories for each target student. Finally, tables were generated to display the distributions of elapsed times for each classroom at each site. For detailed information on the data collection procedures, see Training Manual for Data Collection: SBIF Study, document SBIF-81-R.6-C.

Instructional participation type. Over time, students develop patterns of behavior in their classroom participation. Prior to data collection in each part of the SBIF study, teachers were asked to rate each student's performance according to the 21 behaviors used in the classification scheme. The 21 behaviors were grouped into six categories of participation types. The data were scored and frequency distributions by type calculated. The six participation types used are:

Type I participants are success-oriented students who may be capable of carrying out more than one task simultaneously. They like to work alone, seldom interrupt others or seek help, but know how to initiate interactions with the teacher or others if help is necessary. Type II participants are also oriented toward success, but are more social and enjoy frequent interactions with classmates and the teacher. Type III students are dependent on others, and require feedback and assistance if they are to accomplish instructional tasks successfully. Type IV students attend to tasks, but with little or no active involvement; they seldom volunteer answers or initiate interactions. Type V students frequently isolate themselves from the classroom activities, and are only sporadically engaged in instructional tasks. Type VI students tend to be disruptive and act out during instructional time. These last two types are to some extent "deviant" participators.

For further information on the data collection procedures, see Training Manual for Data Collection: SBIF Study, document SBIF-81-R.6-C.

Analysis Procedures

The question guiding Substudy I-A was: Do the features identified in Part I also characterize bilingual instruction in a sample of classes serving ethnolinguistic groups different from those observed in the first year? Analysis was straightforward and conducted at a descriptive level. From the data collected at the new sites, frequency distributions were obtained for each of the variables described above: classroom context, instructional process, and student. Since these variables describe aspects of bilingual instruction, they also provide information on the occurrence of Part I features.

CHAPTER THREE

RESULTS OF SUBSTUDY I-A

This chapter reports the results of Verification Substudy I-A: an examination of the findings from Part I of the SBIF study with different ethnolinguistic groups at two new sites. The following discussion will provide descriptive data in five areas--organization of instruction, time allocation, active teaching, academic learning time, and student participation styles.

Organization of Bilingual Instruction

This first section presents descriptive data on the organization of instruction in the bilingual classrooms at Sites 7 and 9. It is organized into two major sections, one for each site. The first section focuses on Site 7 and includes: an overview of the bilingual instructional activity structures; a description of the most frequently occurring instructional activity substructures for classes; and data on oral language use.

Site 7

Overview of instructional activity structures. The study sample at Site 7 consisted of 10 classes in an urban school system. The sample included two kindergarten classes, two grade 1 classes, two grade 2 classes, two grade 3-4 combinations, one Grade 3-5 combination, and one grade 6-7 combination class.

As an overall description of Site 7, information on each instructional activity structure component is presented in Table 3.0. This table presents the amount of time in minutes and the percent of total time for each category of a given instructional activity component across the entire site. Because data were collected over four days in the classes at this site, the times in Table 3.0 have been aggregated over classes and observation days and are presented as average minutes per day.

The amount of time per day and percent of the school day for categories of subject matter content are presented in Table 3.0a Approximately equal amounts of instructional time were devoted to language proficiency development in English (45 minutes or 15%) and language proficiency development in L1 (47 minutes or 16%).

Table 3.0

Average Daily Time and Percent of School Day for
15 Components of Activity Structure: Site 7

Table 3.0a

Content	Minutes per day	% of day
Reading (English)	14	5
Reading (L1)	20	7
Language Prof. Dev. (English)	45	15
Language Prof. Dev. (L1)	47	16
Math	46	16
Science/Social Studies	23	8
Art/Music/PE	20	7
Other Instruction	19	6
Two or more	60	20

Table 3.0b

Number of instructional groups	Minutes per day	% of day
One group	117	53
Two groups	75	34
Three groups	15	7
More than three	11	5
Other	1	-

Table 3.0c

Group membership	Minutes per day	% of day
Language proficiency	53	24
Academic ability	36	16
Grade level groups	5	2
Student choice	2	1
Combination	8	4
No division	113	52
Other	1	-

Table 3.0d

Task assignment	Minutes per day	% of day
> 2/3 with teacher	111	51
> 2/3 same task	28	13
Each grp.diff.task	67	31
> 1/2 diff. task	10	5
< 1/2 diff. task	2	1
Other	1	-

Table 3.0e

Number of adult instructors present	Minutes per day	% of day
Teacher only	180	82
Teacher + 1 other	37	17
Teacher + 2 others	-	-
Other	2	1

Table 3.0 (Continued)

Average Daily Time and Percent of School Day for
15 Components of Activity Structure: Site 7

Table 3.0f

Division of Labor	Minutes per day	% of day
All teamed	-	-
> 2/3 teamed	-	-
1/3 to 2/3 teamed	1	-
< 1/3 teamed	-	-
None teamed	218	99

Table 3.0g

Student Choice	Minutes per Day	% of Day
Task/Product	14	6
Alone or in group	5	2
Time	2	1
Location	1	-
No choice	193	88
Other	4	2

Table 3.0h

Task Completion Dependency	Minutes per Day	% of Day
On other students	-	-
On teacher	199	91
On materials	2	1
Go at own pace	17	8
Did not observe	1	-

Table 3.0 (Continued)

Average Daily Time and Percent of School Day for
15 Components of Activity Structure: Site 7

Table 3.0i

Oral language categories	Students		Teacher		Aide	
	Minutes per day	% of day	Minutes per day	% of day	Minutes per day	% of day
All English	35	16	32	15	8	21
> 2/3 English	39	18	39	18	2	5
1/3 to 2/3 English	49	22	39	18	1	3
< 1/3 English	58	26	58	26	6	15
No English	32	15	47	21	16	40
No talk	6	2	2	1	6	16
Other	1	1	1	-	-	-

Table 3.0j

Feedback	Instructional		Non-Instructional	
	Minutes per day	% of day	Minutes per day	% of day
Sign				
Positive	137	62	103	47
Negative	2	1	38	17
Positive & Negative	61	28	36	16
Publicness				
Public	187	85	167	76
Private	5	2	-	-
Public & Private	8	4	8	4
No feedback observed	19	9	43	20
Other	-	-	-	-

Notes: "-" indicates nothing recorded during observation period for this category.

Reading instruction in English accounted for 14 minutes (5%), and reading in L1, 20 minutes (7%). The remainder of the day was distributed across science and social studies (8%), art, music, and physical education (7%), and other instruction (6%). Thus, reading, language arts, and mathematics instruction accounted for 172 minutes (59%) of the school day at Site 7. On the average, classes at Site 7 spent 60 minutes (20%) of the school day on instruction in two or more content areas. During the hour when there was more than one content area, it is likely that additional basic skills instruction occurred.

Table 3.0b presents information on the number of student groups used during instruction. Students were instructed as one group for 117 minutes (53%) of the average school day. Students were instructed in two groups for 75 minutes (34%) of the day, and in three or more groups for 12 percent of the average school day. On the average at Site 7, over one half of the instructional school day was spent in a single group, and one third of the time in two groups.

When students were grouped for instruction, groups were most often based on language proficiency (24% of the average school day; see Table 3.0c). On other occasions, groups were based on academic ability (16%), grade level (6%), student choice (1%), or a combination (4%) of these. No division into instructional groups accounted for 52 percent of the average school day.

Most of the school day (94%) consisted of students working with three types of task assignments (see Table 3.0d). One half of the instructional day (111 minutes) was devoted to the teacher working directly with more than two thirds of the class, while nearly one third of the time was spent with each group focusing on its own tasks. For 13 percent of the time, more than two thirds of the students had the same task but did not work directly with the teacher.

In the average school day at Site 7, for 180 minutes (82%) of instruction, only the teacher was present. For another 37 minutes (17%), both the teacher and one other adult provided instruction. (See Table 3.0e.)

Within these grouping and supervision patterns, students did not collaborate with other students in completing instructional tasks (see Table 3.0f). For 217 minutes (99%) of the school day, students were not teamed together as part of the instructional organization.

At Site 7, most students did not have choices about the products completed as part of their instructional activity. Table 3.0g indicates that for 193 minutes (88%) of the instructional day, students worked on products that were assigned by the teacher or other instructional staff. Students were allowed to choose their tasks for only 6 percent of the time and whether to work alone or in groups for another 2 percent of the day. Teachers at Site 7 almost always controlled the choice of instructional activities.

Students were dependent on the teacher for completion of tasks (see Table 3.0h). Students' dependency on the teacher was noted for 199 minutes (91%) per day. Students completed tasks at their own pace for 8 percent of the time.

The oral language used by students, teachers, and aides is recorded in Table 3.0i. Students and teachers spoke exclusively in English about 15 percent of the time, and aides about 21 percent of the time. For students and teachers, the figures for Spanish alone were similar (15% and 21%). Aides, however, spoke in Spanish a much greater portion of the time (40%). This meant that teachers and students used a combination of English and Spanish a high proportion of the day (over 60%), while aides did so only 23 percent of the time.

Table 3.0j summarizes oral feedback to students during the average school day. Feedback has been characterized as either instructional or non-instructional. In addition, the degree of publicness and the sign of oral evaluation were coded. Nearly two thirds of the instructional (positive or negative) feedback observed was positive in nature, whereas only 1 percent was negative. Feedback that had both positive and negative characteristics was observed 28 percent of the time. Noninstructional feedback also was primarily positive (47%); negative feedback was noted 17 percent of the instructional time. Sixteen percent of non-instructional feedback was coded as both positive and negative. The majority of feedback was given publicly for both instructional (85%) and non-instructional (76%) evaluations. There was little private instructional and no private non-instructional feedback given. Note that no feedback was observed for 9 percent of the instructional and 20 percent of the non-instructional activities.

In summary, the schooling experiences for students at Site 7 can be described by the following: (a) instruction in reading, language arts, and math in both English and Spanish accounted for over one-half of the school day; (b) students were instructed as a total group or instructed in two groups for most of the day; (c) most instruction was given to the entire class, but when grouping did occur, it was based on language proficiency or academic ability; (d) the majority of classes worked directly with the teacher about one-half of the school day, while (e) specific groups worked on different tasks onethird of the time; (f) the teacher was the only adult present for most of the instructional day; (g) students rarely collaborated with other students in completing instructional tasks and were given little choice of those activities; (h) completion of those tasks was dependent on the teacher and was not delayed due to scarcity of materials; (i) students and teachers spoke a mixture of English and Spanish for about two-thirds of the day, while aides spoke either entirely in English or Spanish for two-thirds of the time; and (j) most feedback was public rather than private, and when instructional, was primarily positive.

In interpreting these findings, it is important to keep in mind that this overview description does not necessarily represent

any specific classroom very well. In order to get a picture of individual classrooms, it is necessary to examine the instructional activity structure components at the class level.

Frequently occurring instructional activity substructures. In addition to the description of the activity structure components generally used in the Site 7 classrooms, it is important to know which combinations of components occurred most frequently. These provide potentially important descriptions of contexts for instruction within each of the classes. Table 3.1 provides information regarding five activity structure components: subject matter content, number of instructional groups, group membership, task assignment and number of adult instructors. Combinations of these five components constitute substructures that may prove to be significant instructional features, inasmuch as the conditions of learning influence the skills and knowledge that are acquired.

Table 3.1 lists for each classroom those substructures which accounted for a minimum of 10 percent of the school day on the average for that classroom. That is, most students in a given class spent at least 10 percent of their school day in each of these substructures. These data do not indicate whether the total time accounted for by a substructure was continuous or not. In most cases, each frequently occurring substructure would have been set up in the class on several occasions and the time reported is the percent of total time accumulated in that substructure. The critical point here is that for a substructure to be listed as a frequently occurring substructure, it had to consume a minimum of 10 percent of the average school day.

Examination of Table 3.1 reveals that when subject matter is ignored, the number of substructures decreases considerably. For ease in referring to commonly occurring activity substructures, a letter designation was given to each unique substructure. The letter designations remain consistent with those reported for Part I of the SBIF Study (see Document SBIF-81-R.2/R.6-III.1). However, some additional codes have been added for new substructures identified at Site 7.

The second column in Table 3.1 lists the letter assigned to each instructional activity substructure. There were 10 different frequently occurring instructional activity substructures identified for the 10 classrooms at Site 7. Substructures for nine classes are reported; none reached the 10 percent criterion in Class 7.

Six substructures were noted more than once, while four were observed only once. The substructure which occurred most frequently is ASs-A (14 times and in seven of the nine classrooms). In this substructure, instruction is delivered by the teacher to the whole group (more than two-thirds of the students work with the teacher), with no aide present. This substructure was distributed over four content areas (math, science/social studies, reading/language acts, and art/music/physical education). Classes 2 and 4 contained

Table 3.1

Daily Time Spent in Frequently Occurring
Instructional Activity Substructures by Class: Site 7

Class (Grade Level)	ASs[1]	Activity substructure					Minutes per day	% of day
		Subject focus	Number of groups	Group membership	Task assignment	Number of adults		
1 (K)	S	Reading/Language Arts	Two	Language proficiency	Each group own task	Teacher +1	16	13
	S	Math	Two	Language proficiency	Each group own task	Teacher +1	18	14
	P	Art/Music/ Phys. Ed.	One	No division	>2/3 with teacher	Teacher +1	17	13
2 (2)	J	Reading/Language Arts	Two	Language proficiency	Each group own task	Teacher only	67	24
	J	Combination	Two	Language proficiency	Each group own task	Teacher only	59	22
	A	Math	One	No division	>2/3 with teacher	Teacher only	35	13
3 (3-4)	A	Reading/Language Arts	One	No division	>2/3 with teacher	Teacher only	76	28
	A	Math	One	No division	>2/3 with teacher	Teacher only	48	18

Table 3.1 (Continued)

Daily Time Spent in Frequently Occurring
Instructional Activity Substructures by Class: Site 7

Class (Grade Level)	ASs[1]	Activity substructure					Minutes per day	% of day
		Subject focus	Number of groups	Group membership	Task assignment	Number of adults		
4 (6-7)	J	Reading/Language Arts	Two	Language proficiency	Each group own task	Teacher only	48	19
	K	Reading/Language Arts	Three	Language proficiency	Each group own task	Teacher only	24	10
	AM	Math	Two	Academic skills	Each group own task	Teacher only	38	15
	A	Science/ Social Studies	One	No division	>2/3 with teacher	Teacher only	26	10
5 (K)	P	Reading/Language Arts	One	No division	>2/3 with teacher	Teacher +1	28	20
	AN	Reading/Language Arts	Two	Academic skills	Each group own task	Teacher +1	35	26
	AN	Combination	Two	Academic skills	Each group own task	Teacher +1	14	10
	P	Combination	One	No division	>2/3 with teacher	Teacher +1	17	12
	AN	Combination	Two	Academic skills	Each group own task	Teacher +1	23	17

Table 3.1 (Continued)

Daily Time Spent in Frequently Occurring
Instructional Activity Substructures by Class: Site 7

Class (Grade Level)	ASs[1]	Activity substructure					Minutes per day	% of day
		Subject focus	Number of groups	Group membership	Task assignment	Number of adults		
6 (1)	K	Reading/Language Arts	Three	Language proficiency	Each group own task	Teacher only	33	12
	A	Math	One	No division	>2/3 with teacher	Teacher only	51	18
	A	Science/ Social Studies	One	No division	>2/3 with teacher	Teacher only	28	10
	A	Art/Music/ Phys. Ed.	One	No division	>2/3 with teacher	Teacher only	28	10
8 (2)	X	Reading/Language Arts	More than three	Language proficiency	Each group own task	Teacher +1	47	19
	A	Science/ Social Studies	One	No division	>2/3 with teacher	Teacher only	37	15
	A	Art/Music/ Phys. Ed.	One	No division	>2/3 with teacher	Teacher only	33	14

Table 3.1 (Continued)

Daily Time Spent in Frequently Occurring
Instructional Activity Substructures by Class: Site 7

Class (Grade Level)	ASs[1]	Activity substructure					Minutes per day	% of day
		Subject focus	Number of groups	Group membership	Task assignment	Number of adults		
9 (1)	A	Reading/Language Arts	One	No division	>2/3 with teacher	Teacher only	91	38
	A	Math	One	No division	>2/3 with teacher	Teacher only	33	14
	A	Science/ Social Studies	One	No division	>2/3 with teacher	Teacher only	37	15
10 (3-4)	A	Reading/Language Arts	One	No division	>2/3 with teacher	Teacher only	54	21
	I	Reading/Language Arts	Two	Combination	>2/3 with teacher	Teacher only	25	10
	AO	Combination	Two	Combination	>2/3 same task	Teacher only	28	11
	A	Math	One	No division	>2/3 with teacher	Teacher only	41	16

no substructure other than ASs-A. It was also the primary substructure for classes 6 and 8.

Certain substructures were classroom specific. For example, ASs-S occurred only in Class 1, in math and reading/language arts instruction. In this substructure, the class was divided into two groups based on language proficiency, with each group working on a different task. The teacher and one aide were present for this substructure. Substructure ASs-J was identical, with the exception that only the teacher was present. It was found only in Class 2 reading/language arts and combined instruction. Substructure ASs-P was noted only in Class 5. It was characterized as a classroom without division into groups, with greater than two-thirds of the students working with the teacher, and without the presence of another adult. The remainder of the activity substructures were noted in only one instance.

The classes at Site 7 varied on the proportions of time students spent in the identified substructures. In no classroom at Site 7 did frequently occurring substructures accounting for more than one-half of the school day. This implies that students spent time in a relatively large number of activity substructures. The substructure that accounted for the greatest proportion of the school day (38%) was ASs-A in Class 9. Six substructures accounted for between 20 and 28 percent of the time, while the remainder accounted for 10 to 19 percent.

A description of instruction for each classroom at Site 7 is taken up in the last section of this Chapter. An integration of particular instructional activity substructures with information about language use is then presented. In the next section, use of L1 and L2 during substructures is discussed.

Oral language usage. This section describes the use of oral language within each of the activity substructures accounting for 10 percent or more of the average school day in a classroom. Table 3.2 presents this information. In the left-most columns of the table, individual classes are noted, with grade level in parentheses. The activity substructures (ASs) for that class are listed. For example, in Class 1 two substructures were identified in three subject areas (ASs-S in reading/language arts and math and ASs-P in art/music/physical education). Activity substructure numbers correspond to those in Table 3.1; that table may be consulted for a description of a particular activity substructure. Below the letter designation for each ASs, the percent of the school day that the ASs was observed is given in parenthesis.

Table 3.2 presents information on oral language use by students, teachers and aides (when present). This information is given for each activity substructure occurring at Site 7. Information is given on the proportion of time students, teachers, and aides spoke only in English; spoke English more than two thirds of the time; spoke English between one third and two thirds of the time; spoke English less than one third of the time; spoke no English; and did not speak at all.

Table 3.2

Oral Language Use by Student, Teacher and Teacher Aide
in Frequently Occurring Instructional Activity Substructures by Class: Site 7

Class (Grade Level)	ASs[1]	Speaker	Language Use											
			All English		>2/3 English		1/3-2/3 English		<1/3 English		No English		No talk	
			%Time in ASs	(%Time total)	%Time in ASs	(%Time total)	%Time in ASs	(%Time total)	%Time in ASs	(%Time total)	%Time in ASs	(%Time total)	%Time in ASs	(%Time total)
1 (K)	S (13)	Student	-	(2)	-	(4)	-	(60)	100	(35)	-	(-)	-	(-)
		Teacher	-	(4)	-	(2)	-	(38)	100	(31)	-	(26)	-	(-)
		Aide	43	(63)	57	(18)	-	(-)	-	(4)	-	(3)	-	(13)
	S (14)	Student	-	(2)	-	(4)	-	(60)	100	(35)	-	(-)	-	(-)
		Teacher	-	(4)	-	(2)	-	(38)	100	(31)	-	(26)	-	(-)
		Aide	45	(63)	55	(18)	-	(-)	-	(4)	-	(3)	-	(13)
	P (13)	Student	-	(2)	-	(4)	100	(60)	-	(35)	-	(-)	-	(-)
		Teacher	-	(4)	-	(2)	100	(38)	-	(32)	-	(26)	-	(-)
		Aide	100	(63)	-	(18)	-	(-)	-	(4)	-	(3)	-	(13)
	J (24)	Student	6	(3)	18	(14)	20	(37)	55	(46)	-	(1)	-	(-)
		Teacher	6	(3)	18	(8)	-	(33)	73	(52)	3	(5)	-	(-)
		Aide	-	(-)	-	(-)	-	(-)	-	(-)	-	(100)	-	(-)

Table 3.2 (Continued)

Oral Language Use by Student, Teacher and Teacher Aide
in Frequently Occurring Instructional Activity Substructures by Class: Site 7

Class (Grade Level)	ASs[1]	Speaker	Language Use											
			All English		>2/3 English		1/3-2/3 English		<1/3 English		No English		No talk	
			%Time in ASs	(%Time total)	%Time in ASs	(%Time total)	%Time in ASs	(%Time total)	%Time in ASs	(%Time total)	%Time in ASs	(%Time total)	%Time in ASs	(%Time total)
2 (2)	J (22)	Student	-	(3)	24	(14)	32	(37)	44	(46)	-	(1)	-	(-)
		Teacher	-	(3)	-	(8)	56	(33)	44	(52)	-	(5)	-	(-)
		Aide	-	(-)	-	(-)	-	(-)	-	(-)	-	(100)	-	(-)
	A (13)	Student	-	(3)	-	(14)	100	(37)	-	(46)	-	(1)	-	(-)
		Teacher	-	(3)	-	(8)	100	(33)	-	(52)	-	(5)	-	(-)
		Aide	-	(-)	-	(-)	-	(-)	-	(-)	-	(100)	-	(-)
3 (3-4)	A (28)	Student	71	(82)	-	(2)	-	(-)	4	(8)	25	(8)	-	(-)
		Teacher	71	(82)	-	(2)	-	(-)	-	(7)	29	(9)	-	(-)
		Aide	-	(-)	-	(-)	-	(100)	-	(-)	-	(-)	-	(-)
	A (18)	Student	100	(82)	-	(2)	-	(-)	-	(8)	-	(8)	-	(-)
		Teacher	90	(82)	10	(2)	-	(-)	-	(7)	-	(9)	-	(-)
		Aide	-	(-)	-	(-)	-	(100)	-	(-)	-	(-)	-	(-)

Table 3.2 (Continued)

Oral Language Use by Student, Teacher and Teacher Aide
in Frequently Occurring Instructional Activity Substructures by Class: Site 7

Class (Grade Level)	ASs[1]	Speaker	Language Use											
			All English		>2/3 English		1/3-2/3 English		<1/3 English		No English		No talk	
			%Time in ASs	(%Time total)	%Time in ASs	(%Time total)	%Time in ASs	(%Time total)	%Time in ASs	(%Time total)	%Time in ASs	(%Time total)	%Time in ASs	(%Time total)
4 (6-7)	J (19)	Student	-	(8)	70	(34)	30	(38)	-	(11)	-	(9)	-	(-)
		Teacher	30	(12)	51	(31)	18	(38)	-	(14)	-	(4)	-	(-)
		Aide	-	(-)	-	(-)	-	(-)	-	(-)	-	(-)	-	(-)
	K (10)	Student	-	(8)	66	(34)	22	(38)	11	(11)	-	(9)	-	(-)
		Teacher	-	(12)	89	(31)	11	(38)	-	(14)	-	(4)	-	(-)
		Aide	-	(-)	-	(-)	-	(-)	-	(-)	-	(-)	-	(-)
	AM (15)	Student	-	(8)	53	(34)	47	(38)	-	(11)	-	(9)	-	(-)
		Teacher	-	(12)	53	(31)	47	(38)	-	(14)	-	(4)	-	(-)
		Aide	-	(-)	-	(-)	-	(-)	-	(-)	-	(-)	-	(-)
	A (10)	Student	-	(8)	31	(34)	27	(38)	42	(11)	-	(9)	-	(-)
		Teacher	-	(12)	-	(31)	58	(38)	42	(14)	-	(4)	-	(-)
		Aide	-	(-)	-	(-)	-	(-)	-	(-)	-	(-)	-	(-)

Table 3.2 (Continued)

Oral Language Use by Student, Teacher and Teacher Aide
in Frequently Occurring Instructional Activity Substructures by Class: Site 7

Class (Grade Level)	ASs[1]	Speaker	Language Use									
			All English		>2/3 English		1/3-2/3 English		<1/3 English		No English		No talk	
			%Time in ASs	(%Time total)	%Time in ASs	(%Time total)	%Time in ASs	(%Time total)	%Time in ASs	(%Time total)	%Time in ASs	(%Time total)	%Time in ASs	(%Time total)
5 (K)	P (20)	Student	22	(4)	53	(16)	-	(10)	-	(1)	25	(68)	-	(-)
		Teacher	-	(-)	62	(18)	13	(10)	-	(3)	25	(68)	-	(-)
		Aide	-	(-)	-	(-)	-	(-)	-	(-)	-	(100)	100	(1)
	AN (26)	Student	-	(4)	-	(16)	-	(10)	-	(1)	100	(68)	-	(-)
		Teacher	-	(-)	-	(18)	-	(10)	-	(3)	100	(68)	-	(-)
		Aide	-	(-)	-	(-)	-	(-)	-	(-)	100	(100)	-	(-)
	AN (10)	Student	-	(4)	-	(16)	-	(10)	-	(1)	100	(68)	-	(-)
		Teacher	-	(-)	-	(18)	-	(10)	-	(3)	100	(68)	-	(-)
		Aide	-	(-)	-	(-)	-	(-)	-	(-)	100	(100)	-	(-)
	P (12)	Student	-	(4)	18	(16)	47	(10)	12	(1)	24	(68)	-	(-)
		Teacher	-	(-)	18	(18)	29	(10)	29	(3)	24	(68)	-	(-)
		Aide	-	(-)	-	(-)	-	(-)	-	(-)	-	(100)	100	(-)

Table 3.2 (Continued)

Oral Language Use by Student, Teacher and Teacher Aide
in Frequently Occurring Instructional Activity Substructures by Class: Site 7

Class (Grade Level)	ASs[1]	Speaker	Language Use											
			All English		>2/3 English		1/3-2/3 English		<1/3 English		No English		No talk	
			%Time in ASs	(%Time total)	%Time in ASs	(%Time total)	%Time in ASs	(%Time total)	%Time in ASs	(%Time total)	%Time in ASs	(%Time total)	%Time in ASs	(%Time total)
5 (K)	AN (17)	Student	-	(4)	-	(16)	-	(10)	-	(1)	100	(68)	-	(-)
		Teacher	-	(-)	-	(18)	-	(10)	-	(3)	100	(68)	-	(-)
		Aide	-	(-)	-	(-)	-	(-)	-	(-)	100	(100)	-	(-)
6 (1)	K (12)	Student	-	(3)	46	(35)	-	(5)	54	(49)	-	(8)	-	(-)
		Teacher	-	(3)	46	(36)	-	(6)	54	(41)	-	(13)	-	(-)
		Aide	-	(26)	-	(-)	-	(-)	-	(74)	-	(-)	-	(-)
	A (18)	Student	-	(3)	47	(35)	-	(5)	53	(49)	-	(8)	-	(-)
		Teacher	-	(3)	47	(36)	-	(6)	53	(41)	-	(13)	-	(-)
		Aide	-	(26)	-	(-)	-	(-)	-	(74)	-	(-)	-	(-)
	A (10)	Student	-	(3)	58	(35)	-	(5)	42	(49)	-	(8)	-	(-)
		Teacher	-	(3)	58	(36)	-	(6)	42	(41)	-	(13)	-	(-)
		Aide	-	(26)	-	(-)	-	(-)	-	(74)	-	(-)	-	(-)

Table 3.2 (Continued)

Oral Language Use by Student, Teacher and Teacher Aide
in Frequently Occurring Instructional Activity Substructures by Class: Site 7

Class (Grade Level)	ASs[1]	Speaker	Language Use											
			All English		>2/3 English		1/3-2/3 English		<1/3 English		No English		No talk	
			%Time in ASs	(%Time total)	%Time in ASs	(%Time total)	%Time in ASs	(%Time total)	%Time in ASs	(%Time total)	%Time in ASs	(%Time total)	%Time in ASs	(%Time total)
6 (1)	A (10)	Student	-	(3)	-	(35)	-	(5)	100	(49)	-	(8)	-	(-)
		Teacher	-	(3)	-	(36)	-	(6)	100	(41)	-	(13)	-	(-)
		Aide	-	(26)	-	(-)	-	(-)	-	(74)	-	(-)	-	(-)
	X (19)	Student	-	(6)	-	(-)	-	(36)	100	(36)	-	(21)	-	(-)
		Teacher	-	(7)	-	(6)	-	(20)	100	(25)	-	(43)	-	(-)
		Aide	-	(4)	-	(-)	-	(-)	100	(65)	-	(30)	-	(-)
8 (1-2)	A (15)	Student	-	(6)	-	(-)	54	(36)	-	(36)	46	(21)	-	(-)
		Teacher	-	(7)	-	(6)	54	(20)	-	(25)	46	(43)	-	(-)
		Aide	-	(4)	-	(-)	-	(-)	-	(65)	-	(30)	-	(-)
	A (14)	Student	40	(6)	-	(-)	60	(36)	-	(36)	-	(21)	-	(-)
		Teacher	40	(7)	-	(6)	60	(20)	-	(25)	-	(43)	-	(-)
		Aide	-	(4)	-	(-)	-	(-)	-	(65)	-	(30)	-	(-)

Table 3.2 (Continued)

Oral Language Use by Student, Teacher and Teacher Aide
in Frequently Occurring Instructional Activity Substructures by Class: Site 7

Class (Grade Level)	ASs[1]	Speaker	Language Use											
			All English		>2/3 English		1/3-2/3 English		<1/3 English		No English		No talk	
			%Time in ASs	(%Time total)	%Time in ASs	(%Time total)	%Time in ASs	(%Time total)	%Time in ASs	(%Time total)	%Time in ASs	(%Time total)	%Time in ASs	(%Time total)
9 (1)	A (38)	Student	4	(8)	57	(37)	6	(5)	19	(33)	14	(16)	-	(-)
		Teacher	2	(7)	45	(20)	6	(5)	32	(48)	15	(20)	-	(-)
		Aide	-	(-)	-	(-)	-	(-)	-	(100)	-	(-)	-	(-)
	A (14)	Student	-	(8)	27	(37)	-	(5)	34	(33)	39	(16)	-	(-)
		Teacher	-	(7)	10	(20)	-	(5)	51	(48)	39	(20)	-	(-)
		Aide	-	(-)	-	(-)	-	(-)	-	(100)	-	(-)	-	(-)
	A (15)	Student	-	(8)	69	(37)	-	(5)	31	(33)	-	(16)	-	(-)
		Teacher	-	(7)	-	(20)	-	(5)	100	(48)	-	(20)	-	(-)
		Aide	-	(-)	-	(-)	-	(-)	-	(100)	-	(-)	-	(-)

Table 3.2 (Continued)

Oral Language Use by Student, Teacher and Teacher Aide
in *Frequently-Occurring Instructional Activity Substructures* by Class: Site 7

Class (Grade Level)	ASs[1]	Speaker	Language Use											
			All English		>2/3 English		1/3-2/3 English		<1/3 English		No English		No talk	
			%Time in ASs	(%Time total)	%Time in ASs	(%Time total)	%Time in ASs	(%Time total)	%Time in ASs	(%Time total)	%Time in ASs	(%Time total)	%Time in ASs	(%Time total)
10 (3-4)	A (21)	Student	69	(25)	31	(8)	-	(11)	-	(29)	-	(27)	-	(-)
		Teacher	27	(12)	73	(22)	-	(11)	-	(13)	-	(43)	-	(-)
		Aide	-	(-)	-	(-)	-	(-)	-	(-)	-	(-)	-	(-)
	I (10)	Student	-	(25)	-	(8)	-	(11)	50	(29)	50	(27)	-	(-)
		Teacher	-	(12)	-	(22)	-	(11)	50	(13)	50	(43)	-	(-)
		Aide	-	(-)	-	(-)	-	(-)	-	(-)	-	(-)	-	(-)
	AO (11)	Student	-	(25)	-	(8)	-	(11)	-	(29)	100	(27)	-	(-)
		Teacher	-	(12)	-	(22)	-	(11)	-	(13)	100	(43)	-	(-)
		Aide	-	(-)	-	(-)	-	(-)	-	(-)	-	(-)	-	(-)
	A (16)	Student	41	(25)	-	(8)	59	(11)	-	(29)	-	(27)	-	(-)
		Teacher	24	(12)	16	(22)	59	(11)	-	(13)	-	(43)	-	(-)
		Aide	-	(-)	-	(-)	-	(-)	-	(-)	-	(-)	-	(-)

Within each column two figures are provided: percent time in the particular activity substructure, and (in parentheses) the percent of the total instructional time, regardless of activity substructure. For example, the first row of Table 3.2 gives information for students in Class 1 while being instructed in ASs-S in reading/language arts. Students spoke in English only less than one percent of the time in that activity substructure. Out of the total instructional time, they spoke in English only 2 percent of the time. The greatest proportion of students' time in ASs-S was spent in speaking English less than one third of the time (100 percent). Thirty-five percent of the total instructional time they spoke English less than one-third of the time. The second and third rows of the table give analagous information for teachers and aides.

It is important to keep in mind that activity substructure information was coded every 15 minutes during the four days of observation. Observers were instructed to categorize oral language use for the entire 15-minute period with one code. When "all English" was coded, that meant the oral language for the 15-minute period was all in English. When "more than two thirds English" was coded, that meant that, over the 15-minute period, more than two thirds of the oral language was in English. This code could have resulted from a long period (say 12 minutes) of uninterrupted English and a short period (say 3 minutes) of uninterrupted non-English or from a 15-minute period when English and non-English were spoken alternately in a ratio of about two thirds (or more) English to one third (or less) of non-English.

Language use in activity substructures. A more accurate depiction of the organization of instruction in bilingual classroms is achieved when language use is considered in relation to the characteristics of particular activity substructures. In this section, therefore, we discuss language use within the predominant activity substructures for each class at Site 7. Data are drawn from both Table 3.1 and Table 3.2.

Class 1--In this kindergarten class (see Table 3.1), three substructures each accounted for at least 10 percent of the school day, and all three involved a teacher and an aide. ASs-S occurred twice in this class. One instance was a two-group reading/language arts activity, with grouping based on language proficiency that accounted for 16 minutes (13%) of the school day. The second instance of ASs-S was a similar activity but in mathematics; it accounted for 18 minutes (14%) of the school day. The other activity substructure, ASs-P involved one group (more than two thirds of the class) working with the teacher and one aide on art/music/ physical education for 17 minutes or 13 percent of the day.

In the first two activity substructures (ASs-S), teachers and students spoke English one third of the time or less, while the aides spoke either entirely in English (43%) or more than two thirds in English (57%). Aides spoke entirely in English 100 percent of the time in ASs-P, while students and teacher spoke between one third and two thirds English all of the time (100%).

Class 2--Three frequently occurring activity substructures were identified in Class 2 (Grade 2). ASs-J involved two groups based on language proficiency; these worked on different tasks with only the teacher present. ASs-J for reading/language arts accounted for 67 minutes (24%) of the day while a combined instructional content accounted for 59 minutes (22%). Both students and teachers spoke a mixture of English and Spanish. Most of that time (55% for students and 73% for teachers) English accounted for less than one third. ASs-A accounted for 35 minutes (13%) of the day, during which students and/or teachers spoke between one third and two thirds in English.

Class 3--Both substructures identified for Class 3 (combination Grades 3 and 4) were ASs-A for reading/language arts 76 minutes (28%) and math 48 minutes (18%). The math instruction was given almost entirely in English (90%) and students responded only in English (100%). Reading/language arts instruction was either in English (71%) or in Spanish (29% for teachers; 25% for students).

Class 4--Four different substructures were identified for Class 4, a combination Grade 6-7 classroom. ASs-J in reading/language arts accounted for 48 minutes (19%) of the time. Students used more English than Spanish (70%) of the time, while teachers used predominantly English (57%) or English only (30%). ASs-K also involved instruction in reading/language arts but for three groups based on language proficiency. Each group had its own task, with only the teacher present. This substructure accounted for 24 minutes (10%) of the day. Again, both teachers and students used a mixture of English and Spanish. Nearly 90 percent of the teacher's talk was English. Substructure ASs-AM involved math instruction given in two groups based on academic skills. Each group had its own task and only the teacher was present. The substructure accounted for 38 minutes (15%) of the day. Ninety-seven percent of ASs-AM was in a mixture of languages for students and teachers. Finally, ASs-A accounted for 26 minutes (10%) in science/social studies instruction in which students and teachers spoke in both Spanish and English. Within this substructure, relatively more time was spent in speaking Spanish.

Class 5--The substructures identified in Class 5 (Kindergarten) were ASs-P and ASs-AN. In reading/language arts, ASs-P accounted for 28 minutes (20%), and in a combined content area, 17 minutes (12%). ASs-P involved total class instruction with the teacher and one aide present. In both cases, the aides were silent, while the teacher spoke either a mixture of languages or only in Spanish (25%). Students' language use ranged from English only (22%) to Spanish only (25%). ASs-AN was identified three times in this class. The substructure involved two-group instruction with grouping based on academic skills. A teacher and an aide were present, and the groups worked on their own tasks. ASs-AN in reading/language arts accounted for 35 minutes (26%). Students, teachers, and aides spoke entirely in Spanish (100%). Two combination content area substructures were noted, accounting for 10 and 17 percent of the

time. Again, all language use was in Spanish.

Class 6--Two substructures were identified in Class 6 (Grade 1), ASs-A and ASs-K. Both substructures involved only a single instructor. ASs-A in math accounted for 51 minutes (18%), in science /social studies 28 minutes (10%), and in art/music/physical education 28 minutes (10%). Both students and teachers used a mixture of English and Spanish, regardless of content area. The remaining substructure, ASs-K occurred in reading/language arts and accounted for 33 minutes (12%) of the day. Again, students and teachers used both languages. Regardless of the substructure, the talk in this class was either mostly in English or mostly in Spanish.

Class 8--Two substructures, ASs-A and ASs-X each occurred more than 10 percent of the time in Class 8 (Grade 2). For ASs-A, science/ social studies instruction accounted for 37 minutes (15%) and art/ music/physical education 33 minutes (14%). In science/social studies, students and the teacher divided their speech about equally between all Spanish (46%) and a relative balance of Spanish and English (54%). When the content was art/ music/p.e., 40 percent of the time was spent in English only. The other substructure, ASs-X, was found in reading/language arts and accounted for 47 minutes (19%) of the day. This substructure involved more than three groups based on language proficiency working with a teacher and aide. Here teachers, students, and aides used one third to two thirds English 100 percent of the time.

Class 9--The predominant substructure in Class 9 (Grade 1) was ASs-A. Within that substructure, reading/language arts accounted for 91 minutes (38%), math, 33 minutes (14%), and science/social studies, 37 minutes (15%). In reading, students and teachers used some combination of English and Spanish 82 percent of the time; in the remaining proportion they used Spanish or English only. Math instruction was entirely in Spanish 39 percent of the time. In science/social studies, teachers used relatively more Spanish.

Class 10--Three substructures were identified in Class 10 (Grades 3 and 4): ASs-A, ASs-I, and ASs-AO. Within ASs-A, math instruction accounted for 41 minutes (16%) and reading/language arts, 54 minutes (21%) of each day. Math was taught mainly in English (73%) or in English only (27%); in reading, however, the teacher used somewhat more Spanish, using English and Spanish approximately equal portions of the time. ASs-AO, was found in a combination of content areas, included two groups who were on the same task, and involved only the teacher. The substructure accounted for 28 minutes (11%) of the time. Both students and teachers spoke only in Spanish (100% of the time). The final substructure, ASs-I, accounted for 25 minutes (10%) of the day. Given in reading/language arts, ASs-I involved two groups working with the teacher only. For both teachers and students, 50 percent of the language was completely in Spanish, the other 50 percent mostly in Spanish.

Summary. The content areas covered in the prevailing activity substructures were reading/language arts and math. Students were grouped for instruction in less than half of the substructures and only the teacher was present in the vast majority of the identified substructures. Consistent with the prevalence of group instruction, task assignment most often involved more than two-thirds of the class working on parallel tasks while being directly supervised by the teacher.

Students, teachers, and aides at Site 7 used two languages extensively during instruction. Oral language usage varied considerably from one activity substructure to another. Aides generally used either English or Spanish during instruction regardless of the substructure. Students and teachers differed from this pattern. Of the activity substructures listed in Table 3.2, most contained a mixture of languages and proportions used. Only in four instances was instruction provided completely in one language (Spanish). In two other substructures, English or mostly English was used for instruction. The remaining substructures either fall in between these extemes or vary across the range of usage.

Regardless of the organization substructures, the profile of oral language use for students and teachers tended to be similar, with the distribution for students "following" the distribution for teachers. The proportion of English compared to Spanish varied considerably but was more heavily weighted toward the use of Spanish. A moderate relationship between oral language usage patterns and grade level was identified. As expected, the lower the grade level the greater the proportion of Spanish language use.

Site 9

Overview of instructional activity structures. This section presents an overview of the bilingual instructional activity structures for Site 9. Since the bilingual program at Site 9 was a pull-out program, information on language use and some facets of instructional activity were available for approximately one and one half hours per day. Data on the most frequently occurring instructional activity substructures and the corresponding oral language use, comparable to those reported for Site 7, have been omitted from the Site 9 description due to the limited time sample that was available for Site 9.

The sample at Site 9 consisted of 11 classes in an urban school system. The sample included one kindergarten-Grade 1 combination, one Grade 1-2 combination, one Grade 2 class, one Grade 1-4 combination, one kindergarten-Grade 5 combination, one Grade 1-5 combination, two kindergarten-Grade 6 combinations, one Grade 2-6 combination, one Grade 5-6 combination, and one Grade 6 class.

An overall description of Site 9, with information on each activity structure component, is presented in Table 3.3. This table gives the amount of time (in minutes) and the percent of total time for each category of a given activity structure component across the

Table 3.3

Average Daily Time and Percent of School Day for
15 Components of Activity Structure: Site 9

Table 3.3a

Content	Minutes per day
Reading (English)	29
Reading (L1)	7
Language Prof. Dev. (English)	36
Language Prof. Dev. (L1)	6
Math	40
Science/Social Studies	14
Art/Music/PE	26
Other Instruction	128
Two or more	33

Table 3.3b

Number of instructional groups	Minutes per day*	% of day*
One group	29	53
Two groups	16	29
Three groups	3	5
More than three	-	-
Other	6	12

Table 3.3c

Group membership	Minutes per day*	% of day*
Language proficiency	10	18
Academic ability	16	30
Grade level groups	5	8
Student choice	-	-
Combination	6	11
No division	18	33
Other	-	-

Table 3.3d

Task assignment	Minutes per day*	% of day*
> 2/3 with teacher	29	51
> 2/3 same task	5	9
Each grp.diff.task	7	12
> 1/2 diff. task	7	12
< 1/2 diff. task	9	16
Other	-	-

Table 3.3e

Number of adult instructors present	Minutes per day*	% of day*
Teacher only	26	47
Teacher + 1 other	26	46
Teacher + 2 others	3	6
Other	-	-

* At Site 9, data were collected during the one and one half hour pull out bilingual program. Therefore the data in these tables reflect the "bilingual program day" rather than the entire school day.

Table 3.3 (Continued)

Average Daily Time and Percent of School Day for
15 Components of Activity Structure: Site 9

Table 3.3f

Division of Labor	Minutes per day*	% of day*
All teamed	-	-
> 2/3 teamed	-	-
1/3 to 2/3 teamed	3	6
< 1/3 teamed	-	-
None teamed	53	94

Table 3.3g

Student Choice	Minutes per day*	% of day*
Task/Product	1	1
Alone or in group	-	-
Time	7	13
Location	26	46
No choice	22	39
Other	-	-

Table 3.3h

Task Completion Dependency	Minutes per day*	% of day*
On other students	2	4
On teacher	3	6
On materials	-	-
Go at own pace	33	60
Did not observe	17	30

* At Site 9, data were collected during the one and one half hour pull out bilingual program. Therefore the data in these tables reflect the "bilingual program day" rather than the entire school day.

Table 3.3 (Continued)

Average Daily Time and Percent of School Day for
15 Components of Activity Structure: Site 9

Table 3.3i

Oral language categories	Students		Teacher		Aide	
	Minutes per day*	% of day*	Minutes per day*	% of day*	Minutes per day*	% of day*
All English	2	3	9	16	14	51
> 2/3 English	27	48	23	41	9	32
1/3 to 2/3 English	15	26	17	30	4	13
< 1/3 English	12	22	7	12	1	4
No English	-	-	1	1	-	-
No talk	-	-	-	-	-	-
Other	-	-	-	-	-	-

Table 3.3j

Feedback	Instructional		Non-Instructional	
	Minutes per day*	% of day*	Minutes per day*	% of day*
Sign				
Positive	46	82	6	11
Negative	-	-	1	2
Positive & Negative	4	7	25	45
Publicness				
Public	47	84	17	32
Private	3	6	1	2
Public & Private	-	-	13	24
No feedback observed	6	10	23	42
Other	-	-	-	-

Notes: "-" indicates nothing recorded during observation period for this category.

* At Site 9, data were collected during the one and one half hour pull out bilingual program. Therefore the data in these tables reflect the "bilingual program day" rather than the entire school day.

entire site. Although data were collected on four occasions in each class at this site, the times in Table 3.3 have been averaged over classes and occasions and are presented as average minutes observed per day. At Site 9, data were collected for only one and one-half hours each morning. With the exception of Table 3.3a the results presented reflect this small time sample.

In Table 3.3a, the amount of time per day allocated to different subject matter content areas at Site 9 is presented. Since direct observations were made only during the pull-out bilingual period, times for science/social studies, art/music/PE, and "other instruction" are to a large extent estimated. On the average, 29 minutes of each day were allocated to reading in English, 36 to language proficiency development in English, and 40 to mathematics.

Table 3.3b presents information on the number of student groups used during instruction. Figures in this table, and in subsequent tables, are based entirely on observed time in the bilingual pull-out period. Students were instructed as one group for 53 percent of the average pull-out period, and an additional 29 percent of the instruction occurred in two groups.

When students were grouped for instruction, groups were most often based on academic ability (30% of the time; see Table 3.3c). Grouping on language proficiency occurred 18 percent of the pull-out period, while grade level groups accounted for another 8 percent. Grouping on a combination of variables was noted for 11 percent, and there was no division into groups for one third of the pull-out instruction.

When task assignment was recorded, one half of the time was devoted to the teacher working directly with more than two thirds of the class (see Table 3.3d). The remainder of the instructional time was distributed across the four other task assignment conditions. In descending order, less than one half of the students worked on different tasks for 16 percent of the pull-out period, more than one half the class on different tasks for 12 percent, each group on different tasks for 12 percent, and more than two thirds of the class on the same task for 9 percent of the pull-out period.

Table 3.3e indicates that most of the instruction in the bilingual program at Site 9 was given with only the teacher present (47%) or with the teacher and one other adult present (46%). Six percent of the school day was accounted for when the teacher and two other adults were present in the classroom.

Within these grouping and supervision patterns, students did not collaborate with other students in completing instructional tasks for the majority of the observed time (see Table 3.3f). Students were not teamed together as part of the instructional organization for 94 percent of the time. The remaining 6 percent of the day was spent with one third to two thirds of the students collaborating on a given task.

At Site 9, students were given choices pertaining to location and time of work, but not grouping or the product (see Table 3.3g). Only for 1 percent of the time were students given choice over the task whereas they exercised control over location of work 46 percent of the time. Choice also was exercised for time of work 13 percent of the observed time. However, students worked on tasks that were assigned by the teacher or other instructional staff 39 percent of the time.

Students were allowed to proceed at their own pace 60 percent of the time that they were observed for task completion dependency (see Table 3.3h). However, dependency was not observed for nearly one third of the instructional day. The remainder of the observed time was spent with students either dependent upon the teacher (6%) or other students (4%) for completion of assigned tasks.

The oral language used by students, teachers, and aides is recorded in Table 3.3i. The aides relied most heavily on English as they spoke only in English for one half of the observed time. The remaining time was spent speaking a mixture of English and Ilokano, but more heavily weighted toward English. Students spent little time speaking English only (3%). Instead, they used a mixture of English and Ilokano, also weighted more heavily toward English. They used more than two-thirds English nearly one-half the time with the two other language mixture categories being used about one quarter of the observed time. Teachers also relied most heavily on a language mixture. They used more then two thirds English 41 percent of the observed time.

Table 3.3j summarizes oral feedback contingent upon student responses that were observed. Oral feedback was coded as instructional or non-instructional, and as public or private. Most of the instructional feedback provided to students was positive (82%) and public (84%). No negative instructional feedback was noted, while little was considered private (6%). No instructional feedback was observed during 10 percent of the observed time in contrast to no non-instructional feedback 42 percent of the time. When non-instructional feedback was observed, nearly one-half contained both positive and negative signs (45%). Only 2 percent of the non-instructional feedback was considered negative and 11 percent as positive. Thirty-two percent of this feedback was public while only 2 percent was private.

In summary, the experiences of students at Site 9 during their pull-out bilingual period can be described by the following: (a) a major portion of the time was allocated to basic skills instruction; (b) students were instructed as a total group or instructed in two groups for most of the observed time; (c) one third of the instruction was directed to the entire class, but when grouping did occur, it was based on academic ability or language proficiency; (d) the majority of classes worked directly with the teacher about one-half of the observed time; (e) instructional supervision was provided

by the teacher alone, or with one other adult for most of the observed time; (f) students rarely collaborated with other students in completing instructional tasks but were given some choice over those tasks; (g) such choice usually concerned the location or time of work, although they were not given any choice 39 percent of the time; (h) students were allowed to go at their own pace for nearly two thirds of the observed time; (i) students, teachers, and aides showed different patterns of oral language with the aides using more English while the students and teachers spoke mostly in some mixture of English and Ilokano; and (j) when observed, most feedback was public rather than private; when instructional, was primarily positive; and when non-instructional, was mostly a combination of both positive and negative.

Time Allocation

The purpose of this section is to examine how instructor time was allocated to subject matter content, materials, student groups, and several facets of oral language use. Each of these four issues is dealt with first for Site 7 and then for Site 9.

The data regarding subject matter content were obtained through the Activity Structure Procedure (ASP) described in Chapter Two. Information on allocation of time to materials, student groups, and oral language use was based on data collected by the Time Allocation Procedure (TAP), also described in Chapter Two.

Site 7

The sample at Site 7 consisted of 10 classes in an urban school system. Many students spoke Spanish as their first language and were of limited English language proficiency. Most of the students had linguistic and cultural ties to Puerto Rico, Mexico, or Cuba.

Subject matter content. The amount of time per day and percent of the school day for categories of subject matter content are presented in Table 3.4 for Site 7. These data were collected over four days of instruction in each classroom using the Activity Structure Procedure (ASP). The content of instruction was coded every 15 minutes during the entire school day by trained observers. The ASP records each of the major content areas for the entire class during the school day.

On the average, classes at Site 7 spent 126 minutes per day or 54 percent of the school day in reading/language arts instruction. Reading/language arts for the SBIF descriptive study is defined broadly to include time spent in any of the following instructional areas: reading instruction in both L1 and L2, silent reading, language development activities, writing, English-as-a-Second Language

Table 3.4

Allocation of Instructional Time to Subject Matter Content (by Class): Site 7
(Entries are minutes per day and percent of the instructional day)

Class	Grade	Content of Instruction				
		Reading/ Language Arts	Mathe-matics	Social Studies/Science	Art/ Music/PE	Other
1	K	54 (43)	35 (27)	- (-)	17 (14)	20 (16)
2	2	155 (56)	62 (23)	35 (13)	3 (1)	19 (7)
3	3-4	155 (58)	60 (22)	22 (8)	16 (6)	17 (6)
4	6-7	149 (60)	38 (15)	40 (16)	9 (4)	14 (5)
5	K	82 (60)	40 (29)	- (-)	- (-)	15 (11)
6	1	122 (44)	51 (18)	28 (10)	28 (10)	48 (17)
7	3-4-5	144 (53)	44 (16)	22 (8)	15 (6)	[illegible] (17)
8	2	105 (43)	62 (25)	37 (15)	33 (14)	[illegible])
9	1	123 (51)	33 (14)	50 (20)	33 (14)	3 (1)
10	3-4	172 (69)	41 (16)	- (-)	42 (16)	- (-)
Average:	Site 7	126 (54)	47 (20)	23 (10)	20 (8)	19 (8)

(ESL) activities, and at Site 7, Spanish-as-a-Second Language (SSL) activities. Mathematics instruction accounted for an additional 47 minutes or 20 percent of the average instructional day. Social studies and science combined accounted for 10 percent of the day, art, music, and physical education accounted for 8 percent of the day, and other instruction an additional 8 percent.

Reading/language arts and mathematics together accounted for 173 minutes (74%) of the school day. Instruction in these basic skills areas was clearly the focus of schooling for students at Site 7. Note that the sample includes two kindergarten classes which have shorter school days than the other classes in the sample and therefore have correspondingly smaller allocations of time to specific content areas. No adjustment for length of school day has been made in Table 3.4.

Use of materials. This section focuses on the materials used during instruction by classroom instructors. We are interested in describing the overall language characteristics of materials used by instructors in this sample of bilingual instructional settings. Observers coded the language of materials being used during instruction. In all cases, the materials had to be in use in order to be coded; mere presence of materials in the classroom was disregarded in this coding system.

From Table 3.5 it can be seen that English language materials at Site 7 were used, on the average, 37 percent of the observed basic skills time, and Spanish-language materials were used 21 percent of the observed time. Bilingual materials--that is, materials which were printed in two languages--were used infrequently (5% of the observed time). Twenty two percent of the observed time, there was no language associated with instructional materials. This means that either no materials were being used during instruction or, if there were materials being used, there was no printed language associated with them.

Large differences were recorded in the language characteristics of materials used in the various classes at Site 7. The primary language of materials was English in Classes 3, 4, and 7; Spanish was predominant in Classes 6, 8 and 10. English and Spanish materials were split evenly in Class 2 while bilingual materials also were used in Class 7. In the early grades, no printed language was associated with instructional materials for much of the school day (Classes 1, 5, 6, and 9).

In summary, across classes at Site 7 instructors used English language materials over one third of the time, and Spanish-language materials approximately one quarter of the time. For the remaining quarter of the time there was no printed language associated with instructional materials. Bilingual materials were not seen to be commonly used during the observation period. However, there was high variability among classes within each of these categories.

Table 3.5

Language of Materials Used by Instructor During Basic Skills Instruction: Site 7

Class	Grade	Language of materials used by instructor							
		English		Spanish		Bilingual[1]		No language[2]	
		Minutes per day	(% of day)	Minutes per day	(% of day)	Minutes per day	(% of day)	Minutes per day	(% of day)
1	K	-	(-)	14	(14)	-	(-)	84	(86)
2	2	109	(48)	114	(50)	-	(-)	6	(2)
3	3-4	163	(80)	42	(20)	-	(-)	-	(-)
4	6-7	125	(64)	24	(12)	45	(23)	-	(-)
5	K	9	(8)	2	(2)	12	(10)	89	(80)
6	1	25	(14)	60	(35)	-	(-)	87	(50)
7	3-4-5	72	(38)	26	(13)	60	(31)	35	(18)
8	2	39	(21)	78	(41)	-	(-)	71	(38)
9	1	18	(11)	7	(4)	-	(-)	139	(85)
10	3-4	97	(44)	121	(56)	-	(-)	-	(-)
Average: Site 7		66	(37)	49	(21)	12	(5)	51	(22)

1 Bilingual denotes that the materials being used by the instructor are printed in two languages.
2 No language means either that no materials are being used or that, if materials are being used, there is no printed language associated with them.

Student groups. During basic skills instruction, instructors sometimes worked directly with, different groups of students. In some cases, the instructor worked directly with the whole group, while in other cases, the instructor worked with a subgroup of the class while the remainder of the class was or was not engaged in a supervised activity. Instructors also spent some time working directly with individual students.

Table 3.6 presents information on how instructors at Site 7 allocated their time to the whole group, a subgroup or individual students. On the average, instructors worked with a whole group 44 percent of the observed basic skills time and with a subgroup of the class for 52 percent of the observed time. Instructors worked with individual students for approximately 4 percent of the observed time.

Individual classes at Site 7 varied considerably in the allocation of instructor time to various student groups. Instructors spent as much as 84 percent of the observed time and as little as 15 percent of the observed time working directly with the class as one group.

No distinct pattern emerged as to grade level and grouping of students. In only three classes (3, 7, and 9) did the teacher spend more time with the whole group rather than with subgroups. In the remaining 7 classes, the majority of the time was spent with subgroups. In Class 9, no time was spent with subgroups; only the entire class or individual students.

In this sample of classes, instructors spent from 0 to 16 percent of the observed time working directly with individual students. In one half of the classes, teachers were observed working with individual students at some point during basic skills instruction. As noted earlier, these data were collected while observers focused on the classroom instructor rather than on the students. That is, the information depicts the activities of the regular classroom teacher but does not include any instruction provided by substitute teachers, or any instruction which took place outside the regular classroom. It is important to keep this distinction in mind, especially when comparing data collected using the TAP with data collected using the ASP. The latter provides information on the class as a whole, while the former focuses strictly on the instructor.

Oral language use. On the average, instructors at Site 7 used oral language during basic skills instruction approximately 94 percent of the observed time. Instructors were silent for approximately 6 percent of the observed time. When instructors were speaking, language was coded either as English or Spanish. Given these categories, instructors at Site 7 spoke in English approximately 39 percent of the observed time, Spanish for 55 percent of the observed time, and were silent six percent of the time (see Table 3.7).

At the class level, there was wide variation in the proportion of time that a specific language was used by the instructor. The instructors were silent during instruction from a low of 1 percent

Table 3.6

Allocation of Instructor Time to Student Groups
During Basic Skills Instruction: Site 7

Class	Grade	Instructor works directly with					
		Whole Group		Sub-group		Individual	
		Minutes per day	(% of day)	Minutes per day	(% of day)	Minutes per day	(% of day)
1	K	15	(15)	83	(85)	-	(-)
2	2	52	(23)	164	(72)	13	(5)
3	3-4	138	(67)	67	(32)	-	(-)
4	6-7	47	(24)	144	(74)	4	(2)
5	K	45	(41)	66	(59)	-	(-)
6	1	79	(46)	94	(54)	-	(-)
7	3-4-5	95	(49)	76	(39)	22	(11)
8	2	68	(36)	113	(60)	8	(4)
9	1	137	(84)	-	(-)	26	(16)
10	3-4	97	(44)	121	(56)	-	(-)
Average:	Site 7	77	(44)	93	(52)	7	(4)

Table 3.7

Instructor's Oral Language Use During Basic Skills Instruction: Site 7

Class	Grade	Instructors' oral language use					
		English		Spanish		Silence [1]	
		Minutes per day	(% of day)	Minutes per day	(% of day)	inutes er day	(% of day)
1	K	10	(10)	87	(89)	1	(1)
2	2	71	(31)	155	(68)	2	(1)
3	3-4	154	(75)	41	(20)	10	(5)
4	6-7	124	(64)	49	(25)	22	(11)
5	K	20	(18)	90	(81)	1	(1)
6	1	90	(52)	82	(47)	1	(0)
7	3-4-5	66	(34)	106	(55)	20	(10)
8	2	48	(26)	132	(70)	9	(5)
9	1	44	(27)	103	(63)	16	(10)
10	3-4	57	(26)	136	(62)	26	(12)
Average:	Site 7	68	(39)	98	(55)	11	(6)

[1]Silence includes time during which the instructor did not speak for at least thirty seconds.

to a high of 11 percent of the observed time. Examination of the rightmost column in Table 3.7 indicates a weak relationship between grade level and amount of instructors' oral language. In the main, the higher the grade level, the more the instructors were silent. Class 9, a first grade class, is an exception (10% of the time was silent). Coupled with data in Table 3.6 which indicates that instruction in these classes mostly was whole-group in nature, this would seem to imply less interaction with the teacher for these students.

At the class level, when instructors were using oral language, use of English ranged from 10 percent of the observed time in Class 1 to 75 percent of the observed time in Class 3. Use of Spanish ranged from 20 percent of the observed time (Class 3) to 89 percent of the observed time (Class 1).

The instructors' oral language use appears to be related to grade level. At the lower grades, especially kindergarten, there was relatively more time allocated to Spanish than to English, while at the higher levels, the reverse was true. Classes 3 and 4 were the only instances where instructors spoke predominantly English. Class 6 had an approximately equal split between English and Spanish. Spanish was the dominant language in all other classes, with the largest differences occuring in the two kindergartens (Classes 1 and 5).

Although Table 3.7 provides information on the total duration of time during which a particular language was used, it does not yield any information on the frequency of the instructors' changes from one language to another. Table 3.8 presents frequencies of language changes for each class at Site 7. On the average, instructors at Site 7 switched from one language to the other approximately 40 times per day during instruction in basic skills.

At the individual class level, instructors made language changes at differing rates. In Class 3 (Grade 3-4 combination), approximately 8 language changes per "basic skills" day were observed while for Class 7 (Grades 3, 4, and 5) 98 changes per "basic skills" day were observed. The Kindergarten classes (1 and 5) also had a relatively low rate of changes (16 and 11 per day). However, an examination of Table 3.8 in conjunction with Table 3.7 reveals no consistent relationship across classes between the number of language changes and the relative use of English or Spanish at Site 7. Similarly, there appears to be no clear relationship between the frequency of instructors' language change and grade level of the students. It would appear that language changes are determined, or at least mediated, by something other than grade level or overall proportion of English to Spanish used in oral instruction.

When an instructor changed from English to Spanish or Spanish to English the first statement in the "new" language was coded in one of four categories. Each time a language change occurred, the first statement in the other language was categorized as instructional development, procedures/directions, behavioral feedback or instructional feedback. By examining the distribution of first statements in these categories we can gain additional insight into the uses of

Table 3.8

Frequency of Instructor's Language Changes
During Basic Skills Instruction: Site 7

Class	Grade	Number of language changes	Language changes: English to Spanish	Language changes: Spanish to English
1	K	16	8	8
2	2	58	29	29
3	3-4	8	4	4
4	6-7	62	32	30
5	K	11	6	5
6	1	78	38	39
7	3-4-5	98	49	49
8	2	27	13	14
9	1	31	16	15
10	3-4	23	12	12
Average: Site 7		40	20	20

language by instructors.

Information on the content of the instructors' first statement after an oral language change is presented in Table 3.9. On the average, the first statement after an oral language change was most often (38% of the observed time) focused on instructional development. The first statement focused on procedures/directions about one-quarter of the time, while behavioral feedback to students was the content of the first statement in the new language 20 percent of the time. Instructional feedback to students was least often provided after a language change (16% of the time). When individual classes are examined, this general distribution holds up to some degree. No instructional development statements were observed in Class 3, while procedures/directions statements outnumbered those that focus on instructional development in two other classes (5 and 10). Behavioral feedback occurred relatively more often than average in Classes 6, 7, and 8. Instructional feedback predominated more than average in Class 4 (Grades 6 and 7).

In addition to content of the first statement after a language change, observers also coded the student group to whom the first statement in the new language was directed. Each time an instructor changed languages, the observer noted whether the first statement in the new language was directed to the whole group, a subgroup of students or to an individual student. Information on this facet of the instructors' oral language use is presented in Table 3.10.

On the average, instructors at Site 7 directed statements in a new language to individual students over one-half the time, to the whole group about one-third of the time, and to subgroups only 16 percent of the time. In examining individual classes, a number of patterns can be identified. In most classes (2, 3, 4, 6, 7, 8, 9, and 10), the first statement in a new language was most often directed to an individual student. Thus, it would seem that instructors in these classes tended to change from one language to another in order to meet the needs of individual students. Classrooms 1 and 5 present an entirely different pattern. In these cases, the vast majority of language changes were directed to the whole class. Note that both of these classes are kindergartens. This is somewhat surprising since both classes were instructed primarily in subgroups.

Summary: Site 7. At Site 7, allocation of instructional time to subject matter content focused on reading/language arts and mathematics and accounted for 74 percent of the school day. During basic skills instruction, instructors used English language materials about one third of the observed time, Spanish language materials about one fifth of the time, and either no materials or non-language materials about one fifth of the time. Bilingual materials were used rarely. Instructors worked directly with the whole class about 44 percent of observed time, with subgroups of students 52 percent of the time, and with individual students only 4 percent of the observed time. This pattern described Site 7 on the average; however, there were wide variations among the classes.

Table 3.9

Frequency Distribution for Content of Instructor's First Statement After Oral Language Change During Basic Skills Instruction: Site 7

Class	Grade	Content of instructor's first statement after language change							
		Instructional Development		Procedures/ Directions		Behavioral Feedback		Instructional Feedback	
		Frequency	%	Frequency	%	Frequency	%	Frequency	%
1	K	8	(55)	4	(28)	2	(10)	1	(7)
2	2	24	(40)	19	(32)	6	(10)	10	(17)
3	3-4	-	(-)	6	(75)	2	(19)	1	(6)
4	6-7	19	(31)	17	(28)	9	(14)	16	(26)
5	K	4	(36)	6	(50)	1	(4)	1	(9)
6	1	25	(32)	19	(25)	28	(36)	5	(6)
7	3-4-5	43	(44)	18	(18)	22	(22)	15	(15)
8	2	9	(38)	5	(21)	6	(25)	4	(17)
9	1	17	(57)	4	(12)	3	(9)	7	(22)
10	3-4	7	(28)	10	(40)	8	(11)	5	(21)
Average:	Site	15	(38)	11	(26)	8	(20)	6	(16)

language by instructors.

Information on the content of the instructors' first statement after an oral language change is presented in Table 3.9. On the average, the first statement after an oral language change was most often (38% of the observed time) focused on instructional development. The first statement focused on procedures/directions about one-quarter of the time, while behavioral feedback to students was the content of the first statement in the new language 20 percent of the time. Instructional feedback to students was least often provided after a language change (16% of the time). When individual classes are examined, this general distribution holds up to some degree. No instructional development statements were observed in Class 3, while procedures/directions statements outnumbered those that focus on instructional development in two other classes (5 and 10). Behavioral feedback occurred relatively more often than average in Classes 6, 7, and 8. Instructional feedback predominated more than average in Class 4 (Grades 6 and 7).

In addition to content of the first statement after a language change, observers also coded the student group to whom the first statement in the new language was directed. Each time an instructor changed languages, the observer noted whether the first statement in the new language was directed to the whole group, a subgroup of students or to an individual student. Information on this facet of the instructors' oral language use is presented in Table 3.10.

On the average, instructors at Site 7 directed statements in a new language to individual students over one-half the time, to the whole group about one-third of the time, and to subgroups only 16 percent of the time. In examining individual classes, a number of patterns can be identified. In most classes (2, 3, 4, 6, 7, 8, 9, and 10), the first statement in a new language was most often directed to an individual student. Thus, it would seem that instructors in these classes tended to change from one language to another in order to meet the needs of individual students. Classrooms 1 and 5 present an entirely different pattern. In these cases, the vast majority of language changes were directed to the whole class. Note that both of these classes are kindergartens. This is somewhat surprising since both classes were instructed primarily in subgroups.

Summary: Site 7. At Site 7, allocation of instructional time to subject matter content focused on reading/language arts and mathematics and accounted for 74 percent of the school day. During basic skills instruction, instructors used English language materials about one third of the observed time, Spanish language materials about one fifth of the time, and either no materials or non-language materials about one fifth of the time. Bilingual materials were used rarely. Instructors worked directly with the whole class about 44 percent of observed time, with subgroups of students 52 percent of the time, and with individual students only 4 percent of the observed time. This pattern described Site 7 on the average; however, there were wide variations among the classes.

Table 3.10

Frequency Distribution for Person or Persons to Whom the Instructor's First Statement After a Language Change Was Directed During Basic Skills Instruction: Site 7

Class	Grade	First statement after instructor's language change directed to: Whole Group Frequency	Whole Group %	Subgroup Frequency	Subgroup %	Individual Frequency	Individual %
1	K	11	(72)	1	(7)	3	(21)
2	2	12	(21)	9	(15)	38	(65)
3	3-4	1	(12)	1	(12)	6	(75)
4	6-7	6	(9)	11	(17)	45	(74)
5	K	7	(64)	2	(14)	3	(23)
6	1	26	(34)	17	(22)	34	(44)
7	3-4-5	37	(38)	21	(21)	40	(41)
8	2	9	(38)	4	(17)	11	(46)
9	1	12	(41)	-	(-)	17	(59)
10	3-4	10	(40)	1	(2)	14	(57)
Average: Site 7		13	(32)	6	(16)	21	(52)

Instructors spoke Spanish during basic skills instruction over one half of the observed time, English about two fifths of the time, and were silent otherwise. Instructors changed between the use of English and Spanish about 40 times per day during instruction in basic skills.

The first statement after a language change involved instructional development about two fifths of the observed time, behavioral feedback one fifth of the time, and instructional feedback one sixth of the time. The first statement after a language change was directed most often to individual students, then to the whole group, and finally to sub-groups of students. There were wide variations across classes.

Site 9

The sample at Site 9 consisted of 11 classes in an urban school system. Filipino students with limited English language proficiency spoke Ilokano as their first language.

The bilingual program for students at Site 9 was carried out as a pull-out program. for major portions of the school day, LEP students, usually from several home classrooms, gathered for bilingual instruction. Data collection in Site 9 focused on this bilingual portion of the instruction. With the exception of allocation of time to subject matter content, information in this section are descriptive of only that portion of the instruction carried out in the bilingual pull-out period.

Subject matter content. The amount of time per day for categories of subject matter content are presented in Table 3.11 for Site 9. These data were collected over four days of instruction in each classroom using the Activity Structure Procedure (ASP). The content if instruction was coded every 15 minutes during the bilingual pull-out period by trained observers. Estimates for the entire school day were made on the basis of teacher reports and schedules. "Other" content thus could include reading, math or other basic skills subjects.

On the average, classes at Site 9 spent 77 minutes per day in reading/language arts instruction. Reading/language arts for the SBIF descriptive study is defined broadly to include time spent in any of the following instructional areas: reading instruction in both L1 and L2, silent reading, language development activities, writing, English-as-a-Second-Language activities. Mathematics instruction accounted for an additional 40 minutes of the average instructional day. Social studies and science combined accounted for 5 percent of the day, art, music, and physical education 9 percent. Other instruction an additional 45 percent.

Reading/language arts and mathematics taken together accounted for 117 minutes of the school day at Site 9, and was therefore a major focus of schooling for students at Site 9.

Table 3.11

Allocation of Instructional Time to Subject Matter Content (by Class): Site 9
(Entries are minutes per day and percent of the instructional day)

Class	Grade	Content of Instruction				
		Reading/ Language Arts	Mathe-matics	Social Studies/Science	Art/ Music/PE	Other
1	1-5	95 (34)	6 (2)	- (-)	12 (4)	167 (60)
2	5-6	38 (16)	32 (13)	5 (2)	24 (10)	143 (59)
3	2-6	56 (20)	23 (8)	29 (11)	44 (16)	121 (44)
4	1-2	42 (14)	5 (2)	- (-)	- (-)	248 (84)
5	K-5	55 (20)	10 (4)	- (-)	- (-)	209 (76)
6	2	38 (13)	98 (34)	- (-)	- (-)	148 (52)
7	6	48 (16)	50 (17)	49 (17)	45 (15)	100 (34)
8	K-1	77 (27)	42 (15)	24 (8)	87 (31)	52 (19)
9	1-4	229 (69)	51 (16)	- (-)	- (-)	52 (16)
10	K-6	92 (32)	51 (18)	18 (6)	71 (24)	57 (20)
11	K-6	78 (20)	67 (23)	32 (11)	8 (2)	113 (38)
Average: Site 9		77 (27)	40 (14)	14 (5)	26 (9)	128 (45)

Use of materials. This section focuses on the materials used during instruction by instructors in the bilingual program. We are interested in describing the overall language characteristics of materials used by instructors in this sample of bilingual instructional settings. To this end, observers coded the language of materials being used during instruction. In all cases, the materials had to be in use in order to be coded; mere presence of materials in the classroom was not reflected in this coding system.

From Table 3.12 it can be seen that English language materials at Site 9 were used on the average 70 percent of the observed basic skills time, and Ilokano language materials were used 6 percent of the observed time. Bilingual materials--that is, materials which were printed in two languages-were not used at all. There was no language associated with instructional materials 24 percent of the observed time. This means that either no materials were being used during instruction or, if there were materials being used, there was no printed language associated with them.

Large differences were recorded in the language characteristics of materials used in the various classes at Site 9. However, these differences are difficult to interpret since several classes had substantial portions of instruction conducted either outside the bilingual classroom or by other instructors. As a result, these portions of instruction were not included in the TAP observation.

The predominant language of materials was English in all classes. Ilokano materials were used in four classes, but in only two of those did the materials consist of a substantial percent of observed time (Classes 4 and 5). The use of no materials or materials without printed language varied considerably across classes with four classes at zero percent up to 56 percent for Class 5 (a kindergarten). Of the 11 classes, six used materials without printed language more than one quarter of the time.

In summary, across classes at Site 9 instructors used English language materials almost three quarters of the time and Ilokano language materials 6 percent of the time. For the remaining one quarter of the time, there was no printed language associated with instructional materials. Bilingual materials were not used during the observation period.

Student groups. During instruction, instructors directed their attention to, or worked directly with different groups of students. In some cases, the instructor worked directly with the whole group, while in other cases, the instructor worked with a subgroup of the class while the remainder of the class was or was not engaged in a supervised activity. Instructors also spent some time working directly with individual students.

Table 3.13 presents information on how instructors at Site 9 allocated their time to the whole group, a subgroup or individual students. On the average, instructors worked with a whole group 68 percent of the observed time and with a subgroup of the class for 24

Table 3.12

Language of Materials Used by Instructor During Basic Skills Instruction: Site 9

Class	Grade	Language of materials used by instructor							
		English		Ilokano		Bilingual[1]		No language[2]	
		Minutes per day	(% of day)	Minutes per day	(% of day)	Minutes per day	(% of day)	Minutes per day	(% of day)
1	1-5	76	(74)	-	(-)	-	(-)	26	(26)
2	5-6	63	(100)	-	(-)	-	(-)	-	(-)
3	2-6	49	(61)	-	(-)	-	(-)	31	(39)
4	1-2	41	(79)	11	(21)	-	(-)	-	(-)
5	K-5	13	(19)	17	(25)	-	(-)	39	(56)
6	2	17	(50)	-	(-)	-	(-)	17	(50)
7	6	49	(100)	-	(-)	-	(-)	-	(-)
8	K-1	15	(57)	-	(-)	-	(-)	11	(43)
9	1-4	39	(81)	1	(2)	-	(-)	8	(17)
10	K-6	21	(58)	-	(-)	-	(-)	15	(42)
11	K-6	58	(89)	7	(11)	-	(-)	-	(-)
Average: Site 9		40	(70)	3	(6)	-	(-)	13	(24)

1 Bilingual denotes that the materials being used by the instructor are printed in two languages.
2 No language means either that no materials are being used or that, if materials are being used, there is no printed language associated with them.

Table 3.13

Allocation of Instructor Time to Student Groups
During Basic Skills Instruction: Site 9

Class	Grade	Instructor works directly with					
		Whole Group		Sub-group		Individual	
		Minutes per day	(% of day)	Minutes per day	(% of day)	Minutes per day	(% of day)
1	1-5	45	(44)	34	(33)	24	(23)
2	5-6	44	(70)	-	(-)	19	(30)
3	2-6	73	(91)	-	(-)	7	(9)
4	1-2	52	(100)	-	(-)	-	(-)
5	K-5	69	(100)	-	(-)	-	(-)
6	2	-	(-)	30	(87)	5	(13)
7	6	-	(-)	49	(100)	-	(-)
8	K-1	11	(43)	15	(57)	-	(-)
9	1-4	48	(100)	-	(-)	-	(-)
10	K-6	15	(42)	21	(58)	-	(-)
11	K-6	65	(100)	-	(-)	-	(-)
Average: Site 9		38	(68)	13	(24)	5	(9)

percent of the observed time. Instructors worked with individual students for approximately 9 percent of the observed time.

Individual classes at Site 9 varied considerably in the allocation of instructor time to various student groups. Instructors spent as much as 100 percent of the observed time and as little as zero percent of the observed time working directly with the class as one group.

These data are somewhat difficult to interpret with respect to differences across grade level since most classes were combinatoins. However, it is apparent that classes varied substantially in allocation of time to student groups. Instructors in two classes (6 and 7) spent no time with the entire class, whereas in classes 4, 5, 9, and 11 all the instructors' time was devoted to whole group instruction. Subgroup instruction predominated in four of the five classes (6,7,8, and 10) in which it was observed.

Furthermore, in this sample of classes, instructors spent from zero to 30 percent of the observed time in basic skills working directly with individual students. Individual instruction was observed in four classes. As noted earlier, these data were collected while observers focused on the classroom instructor rather than on the students. That is, the information depicts the activities of the regular classroom teacher, but does not include any instruction provided by substitute teachers or any instruction which took place outside the bilingual program. It is important to keep this distinction in mind, especially when comparing data collected using the TAP with data collected using the ASP. The latter provides information on the class as a whole while the former focuses strictly on the instructor.

Oral language use. On the average, instructors at Site 9 used oral language during the bilingual portion of instruction approximately 87 percent of the observed time; they were silent for approximately 12 percent of the observed time. When instructors were speaking, language was coded as either English or Ilokano. Given these categories, instructors at Site 9 spoke in English approximately 60 percent of the observed time and Ilokano for 28 percent of the observed time (Table 3.14).

The instructors were silent during instruction from a low of zero percent to a high of 32 percent of the observed time. Silence accounted for more than one fifth of the observed time in four of the classes and was inconsequential in another five classes.

At the class level, when instructors were using oral language, use of English ranged from 34 percent of the observed time in Class 7 to 83 percent of the observed time in Class 10. Use of Ilokano ranged from 10 percent of the observed time (Class 2) to 50 percent of the observed time (Class 9). English was the predominant language in nine of the classes, Ilokano in one (Class 9) and both languages were used equally in Class 6.

Table 3.14

Instructor's Oral Language Use During Basic Skills Instruction: Site 9

Class	Grade	Instructors' oral language use					
		English		Ilokano		Silence[1]	
		Minutes per day	(% of day)	Minutes per day	(% of day	Minutes per day	(% of day)
1	1-5	70	(68)	30	(29)	2	(2)
2	5-6	50	(80)	6	(10)	6	(10)
3	2-6	46	(58)	15	(19)	18	(23)
4	1-2	27	(52)	9	(17)	16	(30)
5	K-5	39	(56)	28	(40)	2	(3)
6	2	22	(65)	12	(34)	1	(1)
7	6	17	(34)	17	(34)	16	(32)
8	K-1	19	(75)	4	(15)	3	(10)
9	1-4	23	(48)	24	(50)	1	(2)
10	K-6	30	(83)	6	(17)	-	(-)
11	K-6	29	(45)	23	(35)	13	(20)
Average:	Site 9	34	(60)	16	(28)	7	(12)

1 Silence includes time during which the instructor did not speak for at least thirty seconds.

Although Table 3.14 provides information on the total duration of time during which a particular language was used, it does not yield information on the frequency of the instructors' changes from one language to another. Table 3.15 presents frequencies of language changes for each class at Site 9. On the average, instructors at Site 9 switched from one langauge to the other approximately 24 times per day during the basic skills observation period.

At the individual class level, instructors made language changes at differing rates. In Class 4, approximately 1 language change per day of basic skills instruction was observed, while for Class 9, 7 changes per day were observed. However, an examination of Table 3.15 in conjunction with Table 3.14 reveals no consistent relationship across classes between the number of language changes and the relative use of English or Ilokano at Site 9. Similarly, there appears to be no clear relationship between the frequency of instructors' language change and grade level of the students. It would appear that language changes are determined, or at least mediated, by something other than grade level or overall proportion of English to Ilokano used in oral instruction.

When an instructor changed from English to Ilokano or Ilokano to English, the first statement in the "new" language was coded in one of four categories. Each time a language change occurred, the first statement in the other language was categorized as: instructional development, procedures/directions, behavioral feedback or instructional feedback. By examining the distribution of first statements in these categories we can gain additional insight into the uses of language by instructors.

Information on the content of the instructor's first statement after an oral language change is presented in Table 3.16. On the average, the first statement after an oral language change was most often (50% of the observed time) focused on instructional development. The first statement focused on procedures/directions 29 percent of the time, instructional feedback 17 percent, while behavioral feedback to students was least often the content of the first statement in the new language. When individual classes are examined, this general distribution holds up to some degree. Instructional development feedback ranged from a low of 29 percent (Class 8) to 100 percent (Class 4), and was the predominant type of statement in all but two classes (8 and 10). Procedures/directions statements ranged from zero (Class 4) to 64 percent (Class 8) while instructional feedback ranged from zero to 27 percent (Classes 2 and 7, respectively). No behavioral feedback was observed in four of the classes, while in the remaining classes, such statements accounted for less than one-fifth of the language changes.

In addition to knowing the content of the first statement after a language change, observers also coded the student group to whom the first statement in the new language was directed. Each time an instructor changed languages, the observer noted whether the first statement in the new language was directed to the whole group, a subgroup

Table 3.15

Frequency of Instructor's Language Changes During Basic Skills Instruction: Site 9

Class	Grade	Number of language changes	Language changes	
			English to Ilokano	Ilokano to English
1	1-5	43	21	22
2	5-6	6	3	3
3	2-6	25	13	12
4	1-2	1	-	1
5	K-5	33	15	18
6	2	16	8	8
7	6	20	10	10
8	K-1	7	4	3
9	1-4	67	34	33
10	K-6	15	7	8
11	K-6	36	19	17
Average:	Site 9	24	12	12

Table 3.16

Frequency Distribution for Content of Instructor's First Statement After Oral Language Change During Basic Skills Instruction: Site 9

Class	Grade	Content of instructor's first statement after language change							
		Instructional development		Procedures/directions		Behavioral feedback		Instructional Feedback	
		Frequency	(Percent)	Frequency	(Percent)	Frequency	(Percent)	Frequency	(Percent)
1	1-5	25	(58)	13	(30)	2	(4)	4	(8)
2	5-6	2	(36)	1	(18)	1	(18)	2	(27)
3	2-6	15	(62)	6	(25)	-	(-)	3	(12)
4	1-2	1	(100)	-	(-)	-	(-)	-	(-)
5	K-5	13	(45)	10	(34)	2	(7)	4	(14)
6	2	6	(39)	6	(35)	2	(10)	3	(16)
7	6	7	(38)	7	(35)	-	(-)	5	(27)
8	K-1	2	(29)	5	(64)	-	(-)	1	(7)
9	1-4	40	(60)	11	(16)	1	(1)	15	(22)
10	K-6	6	(38)	6	(41)	1	(3)	3	(17)
11	K-6	15	(40)	12	(32)	4	(10)	6	(15)
Average:	Site 9	12	(50)	7	(29)	1	(4)	4	(17)

of students or to an individual student. Information on this facet of the instructors' oral language use is presented in Table 3.17.

On the average, instructors at Site 9 directed statements to individual students nearly two-thirds of the time, to the whole group less than one-third of the time, and to subgroups only 5 percent of the observed time. In examining individual classes, a number of patterns can be identified. Statements to subgroups were observed in only five classes, all of which accounted for under 15 percent of the observed time. Statements to the whole group were not observed in two classes, however the other classes ranged from 8 percent (Class 8) to 100 percent (Class 4). It is important to note the limited numbers of observations on which these results are based. Most statements were directed to individual students, the predominant type for all but one class.

Summary: Site 9. At Site 9, allocation of instructional time to subject matter content focused on basic skills (41% of the instructional day). During instruction, instructors used English language materials over two thirds of the observed time, Ilokano language materials 6 percent of the time, and either no materials or non-language materials about one quarter of the time. Bilingual materials were not used. Instructors worked directly with the whole class about 68 percent of the observed time, worked with subgroups of students about 24 percent of the observed time, and worked with individual students about 9 percent of the observed time. This pattern described Site 9 on the average; however, there was wide variation among the classes.

Instructors spoke English during instruction over one-half of the observed time, Ilokano less than one third of the observed time, and were silent otherwise. During the observation periods, instructors changed between the use of English and Ilokano about 24 times per day during basic skills instruction.

The first statement after a language change involved instructional development about one half of the observed time, procedures/directions less than one third of the time, instructional feedback only about one fifth of the time, and behavioral feedback only 4 percent of the time. The first statement after a language change was directed most often to individual students followed by to the whole group (30%), and finally to subgroups (only 5%). Again, however, this depended on the individual class as there was wide variation.

Active Teaching

Data collectors rated the instruction of each teacher in terms of a series of active teaching behaviors (after Good & Grouws, 1975). The purpose of this section of the report is to present information on the ratings of active teaching behaviors for teachers at Sites 7

Table 3.17

Frequency Distribution for Person or Persons to Whom the Instructor's First Statement After a Language Change Was Directed During Basic Skills Instruction: Site 9

Class	Grade	First statement after instructor's language change directed to					
		Whole Group		Subgroup		Individual	
		Frequency	(Percent)	Frequency	(Percent)	Frequency	(Percent)
1	1-5	6	(13)	6	(13)	32	(74)
2	5-6	1	(18)	-	(-)	5	(82)
3	2-6	10	(40)	-	(-)	15	(60)
4	1-2	1	(100)	-	(-)	-	(-)
5	K-5	13	(43)	-	(-)	17	(57)
6	2	-	(-)	2	(10)	14	(90)
7	6	-	(-)	-	(-)	19	(100)
8	K-1	1	(8)	1	(8)	6	(85)
9	1-4	26	(39)	-	(-)	41	(61)
10	K-6	3	(21)	1	(7)	11	(76)
11	K-6	19	(54)	6	(15)	11	(31)
Average: Site 9		7	(30)	1	(5)	15	(65)

and 9.

The active teaching concept was used to generate a series of 5-point rating scales that, taken together, assessed the major elements of active teaching as described in the literature. Details of the rating procedures used are described in Chapter Two.

The average rating for Sites 7 and 9 for each of the items is presented in Table 3.18. The range of ratings on each item is shown in parentheses. The ratings were all made on a scale ranging from 1 to 5. Ratings were made in terms of frequency of occurrence where a rating equal to "1" meant seldom, "3" meant frequently, and "5" meant almost always.

The items are arranged in Table 3.18 in a series of categories. (The number at the left of each item indicates the ordinal position of the item on the actual rating instrument.)

The first two items (1 and 4) are concerned with the degree to which the instructor focused on academic goals and subject matter. The average ratings ranged from 3.5 to 4.5 on the 5-point scale, indicating a high degree of focus on academic matters.

The next set of items (11, 2, 8, 13, and 15) are focused on elements of direct instruction. They deal with the degree to which instructors promoted student engagement, actively presented information, monitored student progress, and provided academic feedback. Again note that the average ratings on these items were consistently high. Raters at Site 9 were in complete agreement on Item 13 that teachers always monitor students' progress toward instructional goals. Scores at Site 7 for Item 8 showed the entire range of ratings.

Item 9 deals with the pacing of instruction. On this item, the average ratings were 4.1 and 4.9. Again, scores at Site 9 showed a small range.

The next set of items (16 and 10) focuses on classroom management. Although the average ratings were very high on Item 10, indicating that instructors in the sample classes rarely had discipline problems, there were a wide range of ratings. On the overall rating of classroom management (Item 16), both sites were consistent with recording averages of 4.5.

The last set of active teaching items (14, 3, and 17) focuses on expectations of instructors for their students and for themselves. Each of these items had a high average and relatively small range, indicating that instructors had high expectations of themselves and their students. Again at Site 9, ratings on Item 3 were a consistent 5.0.

The final three items in Table 3.18 (5, 6, and 12) were included not because they were thought to be related to active teaching, but because they concerned potential issues in classrooms serving LEP students. Item 5 deals with the extent to which instructors used

Table 3.18

Observer Ratings of Teacher Behavior:
Part II of the SBIF Study

Item	Site 7	Site 9
(1) Teacher places a clear focus on academic goals.	4.3 (3.0-4.0)	4.5 (4.0-5.0)
(4) Teacher is task-focused, spending most of the instructional period on the subject matter.	4.3 (3.0-4.0)	3.5 (2.0-5.0)
(11) Teacher promotes high levels of student involvement in classroom tasks, keeps student engagement high, and optimizes learning time.	4.3 (3.0-5.0)	4.4 (3.0-5.0)
(2) Teacher presents and adjusts instruction to maximize student accuracy rates.	4.0 (2.0-5.0)	4.6 (4.0-5.0)
(8) Teacher structures instruction by: (a) outling, (b) explaining, (c) reviewing, (d) summarizing, and (e) promoting extensive content coverage.	3.4 (1.0-5.0)	4.1 (3.0-5.0)
(13) Teacher monitors student progress toward achieving instructional goals.	4.5 (1.0-5.0)	5.0 (5.0-5.0)
(15) Teacher provides immediate and academically oriented feedback to students.	4.9 (4.0-5.0)	4.4 (4.0-5.0)
(9) Teacher paces instruction appropriately.	4.1 (2.0-5.0)	4.9 (4.0-5.0)
(16) Teacher manages classroom well.	4.5 (2.0-5.0)	4.5 (3.0-5.0)
(10) Teacher has lack of discipline problems.	4.4 (1.0-5.0)	4.6 (2.0-5.0)
(14) Teacher expresses high expectations for student achievement.	4.6 (4.0-5.0)	4.2 (4.0-5.0)
(3) Teacher perceives students as capable of learning.	4.4 (2.0-5.0)	5.0 (5.0-5.0)

Continued . . .

Table 3.18 (continued)

(17) Teacher views himself/herself as effective in teaching the curriculum.	4.7 (3.0-5.0)	4.5 (4.0-5.0)
(5) Teacher uses non-commercial, teacher-made materials.	3.2 (1.0-5.0)	3.6 (2.0-5.0)
(6) Teacher responds to cultural cues for minority language culture during instruction.	4.5 (3.0-5.0)	4.4 (4.0-5.0)
(12) Language minority students spend high proportion of time out of the classroom.	1.9 (1.0-5.0)	1.4 (1.0-4.0)

"homemade" materials. This item was included to uncover situations where sufficient materials in L1 were unavailable and instructors may have made their own. The ratings on Item 5 indicate that teachers in this sample used teacher-made materials frequently. However, the range of ratings on the item indicated that some individual teachers did use teacher-made materials very often while others rarely used them.

Item 6 deals with the use of elements from the minority language culture. The ratings indicated that the instructors in this sample used cultural elements frequently and that the variability among teachers was relatively low. The last item (12) concerns the use of pull-out programs in bilingual classrooms. The ratings indicated that students participated in pull-out programs but, not very frequently. There was a wide range of scores on this final item. At Site 9, the bilingual education program was a pull-out program. Ratings on Item 12 indicate that there were very few pull-out programs for LEP students in addition to the bilingual program itself.

Summary

Information on active teaching behaviors was collected in Part II of the SBIF study by observer ratings on 13 items derived from the teaching effectiveness literature. Bilingual observers had many opportunities to observe each of the instructors in the Part II sample. After data collection was completed, each observer rated the instructors they had observed. The active teaching ratings included several aspects of instruction: task orientation and academic emphasis, direct instruction behaviors (including presentation of information, monitoring of students and provision of academically oriented feedback to students), pace of instruction, classroom management behaviors, and teacher expectations of students.

The ratings of task orientation, direct instruction, classroom management, and expectations for students (13 items total) were

uniformly high. Across sites, the ratings on these items were 3.4 or higher (on a 5-point scale). The range of the ratings was relatively narrow, attesting to the homogeneity of the classrooms on these particular dimensions. The low scores were site and item specific in that the average at Site 7 for Item 8 was 3.4 and at Site 9, Item 4 was 3.5. All other averages were above 4.0 on the 5-point scale.

On the whole, these ratings indicated that the teachers were characterized by high frequency of active teaching behaviors. On these elements of instruction, it appeared that this sample of Part II SBIF teachers exhibited those behaviors that have been found in other settings to describe effective teaching.

Academic Learning Time

This section reports data regarding academic learning time collected during Part II of the study. Data for ALT were obtained during basic skills instruction and included allocation of time to subject matter area, student engagement rates, and percent time on high accuracy tasks. The primary objective is to describe the characteristics of limited English proficient students during instruction and some aspects of the organization of classroom activities.

Target students. The academic learning time results for target students are presented in a series of bar graphs in Figures 1 and 2. Each figure presents information for one site. Each bar represents an individual student, students are grouped by class, and classes are ordered by grade level.

The height of each bar represents the average time per day allocated to reading/language arts and mathematics for the student over the four days on which that student was observed. The top of the cross-hatched portion of the bar represents the time the student was engaged in reading/language arts and mathematics tasks. The top of the darkened portion of the bar represents the time spent engaged in tasks with high accuracy (ALT). All times are in minutes.

The distribution of allocated time, engaged time and ALT can be seen by examining Figures 1 and 2. The average amount of time allocated to basic skills, engagement rates, percent time on high accuracy tasks, and ALT were relatively high. The following sections present a variety of aggregations and cross classifications of these basic data.

Classrooms. Tables 3.19 and 3.20 present descriptive data at the class level for each of the sites. Note again that class level data are simple averages over the four target students in that class and that the target students are not selected randomly within class.

Table 3.19 contains descriptive data for Site 7. The total time

Figure 1. Academic learning time for target students at Site 7.

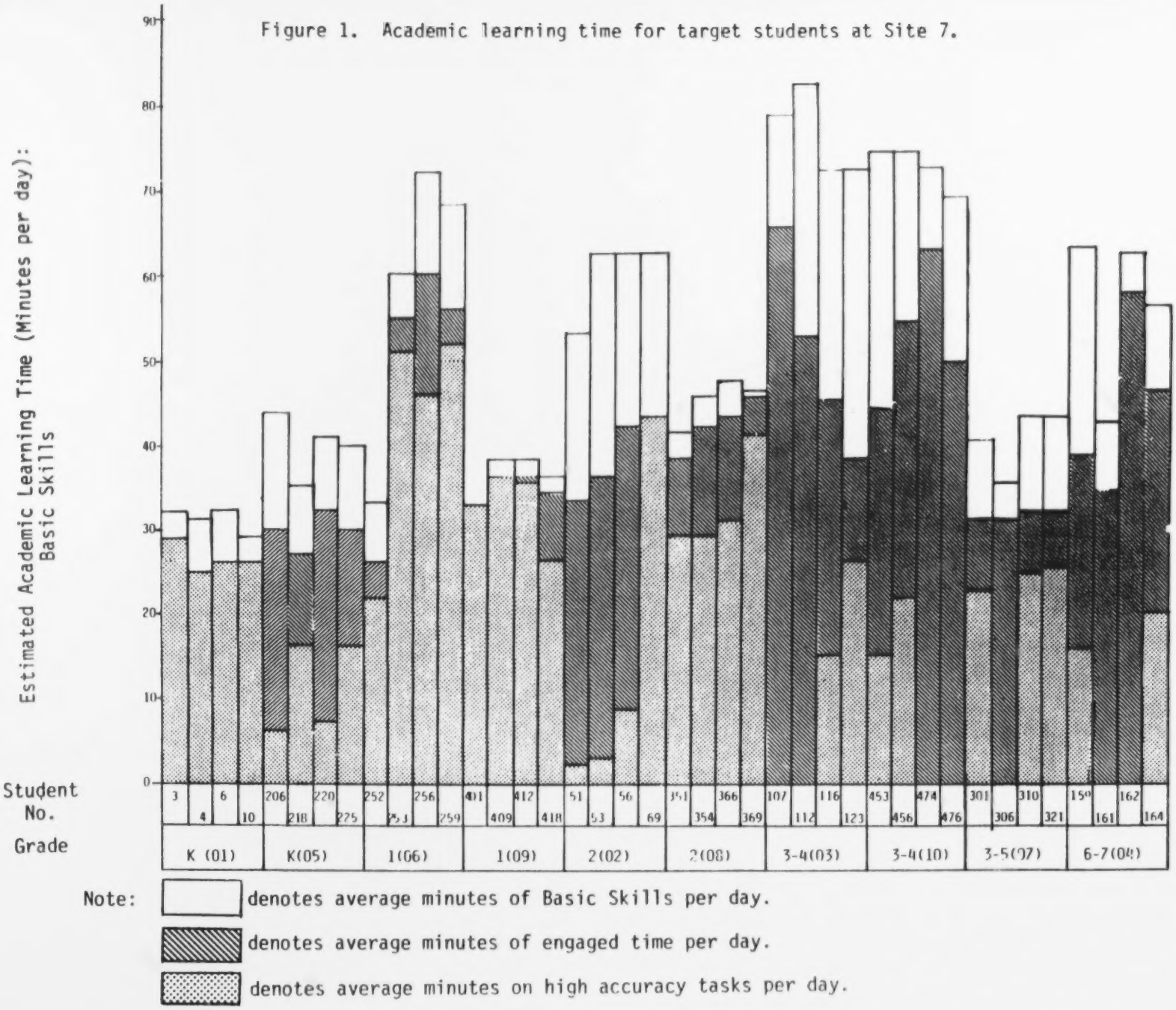
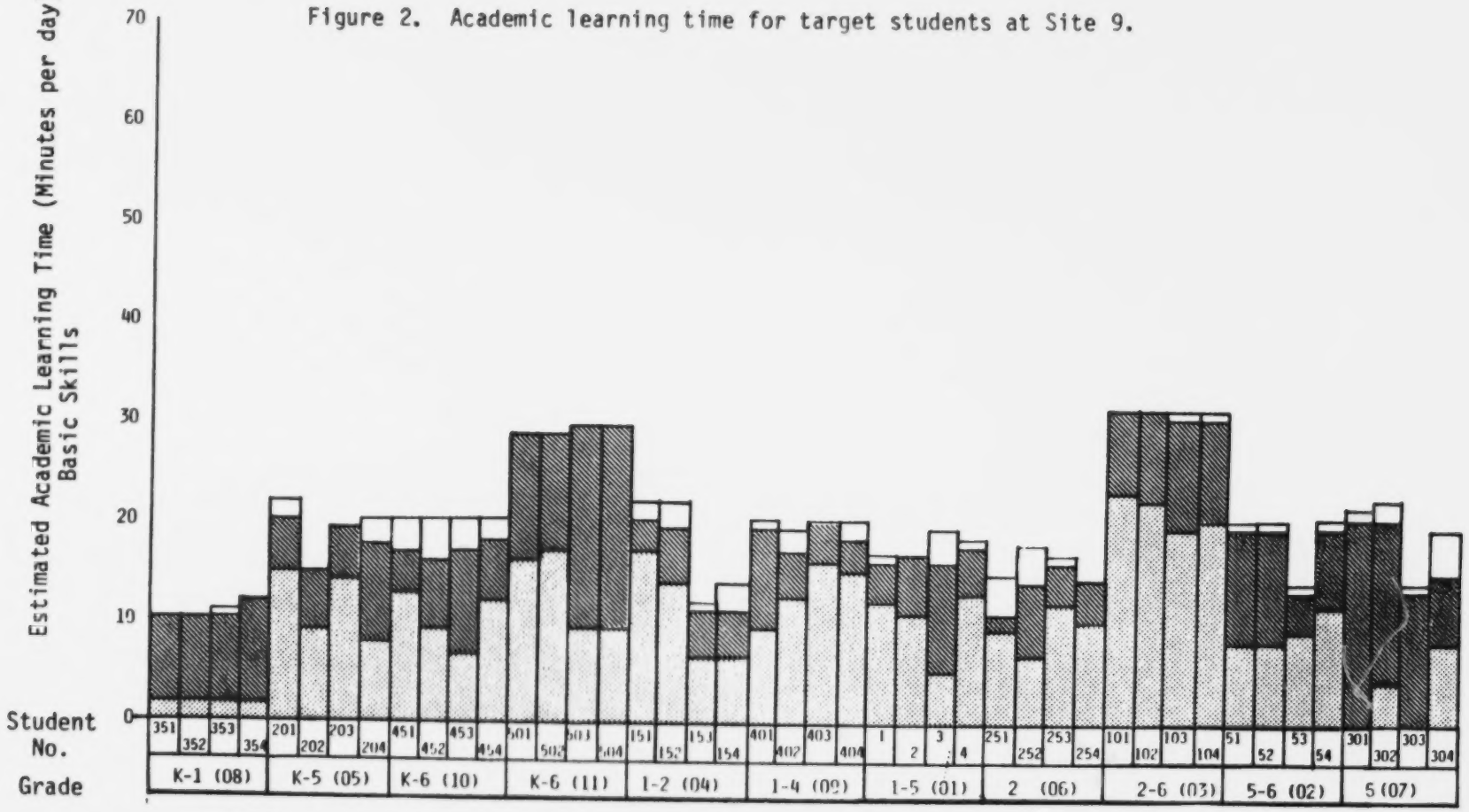


Figure 2. Academic learning time for target students at Site 9.



Note: denotes average minutes of Basic Skills per day.

denotes average minutes of engaged time per day.

denotes average minutes on high accuracy tasks per day.

Table 3.19

Content, Degree of Contact, and Academic Learning Time for Target Students at Site 7: Part II of the SBIF Study

Class	Grade	Content			Degree of Contact			Instructor			Engagement			Level of Accuracy			
		Total Time Rd/ LA/Math per day (Minutes)	Percent Time Rd/ LA	Percent Time Math	High (Percent)	Medium Percent)	Low Percent)	Teacher (Percent)	Aide (Percent)	Other (Percent)	Engaged (Percent)	Not Engaged (Percent)	Interim (Percent)	High (Percent)	Medium (Percent)	Low (Percent)	Avg.A for Target Students (Minutes per day)
1	K	88	69	31	66	34	0	98	2	0	86	4	8	100	0	0	76
2	2	217	87	13	44	28	28	98	2	0	62	25	13	8	75	17	11
3	3-4	215	74	27	62	22	16	93	6	0	49	32	18	50	48	2	53
4	6-7	186	82	18	39	20	42	100	0	0	80	15	5	22	78	0	33
5	K	123	90	10	96	1	4	70	30	0	73	13	13	51	48	1	46
6	1	173	67	34	83	17	0	90	7	4	90	6	4	87	8	45	135
7	3-5	188	71	29	61	31	8	100	0	0	79	15	5	62	35	1	92
8	2	166	56	44	47	46	6	98	2	0	92	5	0	67	25	8	102
9	1	155	90	10	84	3	12	100	0	0	88	8	4	96	4	1	131
10	3-4	213	82	18	50	30	20	100	0	0	70	18	13	16	79	6	24

1 Degree of contact indicates the access that students have to an instructor (High = student in direct contact with instructor; Medium = student is monito55red by instructor but not directly instructed; Low = instructor working with another student or group of students)

2 This set of categories indicates the instructor with whom the student has the highest degree of contact.

3 This column gives an estimate of ALT in Reading, Language Arts, and Mathematics (combined) based on the target students only.

Table 3.20

Content, Degree of Contact, and Academic Learning Time for Target Students at Site 9: Part II of the SBIF Study

		Content			Degree of Contact			Instructor			Engagement			Level of Accuracy			
Class	Grade	Total Time Rd/ LA/Math per day (Minutes)	Percent Time Rd/ LA	Percent Time Math	High (Percent)	Medium Percent)	Low Percent)	Teacher (Percent)	Aide (Percent)	Other (Percent)	Engaged (Percent)	Not Engaged (Percent)	Interim (Percent)	High (Percent)	Medium (Percent)	Low (Percent)	Avg.ALT for Target Students (Minutes per day)
1	1-5	102	95	5	49	1	50	87	120	1	92	4	3	63	29	8	94
2	5-6	70	80	20	43	0	56	98	2	0	94	0	4	57	43	0	38
3	2-6	79	63	37	100	0	0	100	0	0	98	0	2	69	31	0	53
4	1-2	47	80	20	100	0	0	100	0	0	88	2	9	71	29	0	29
5	K-5	65	68	32	100	0	0	100	0	0	98	0	2	64	34	2	41
6	2	137	100	0	72	0	28	98	2	0	86	2	12	69	31	0	81
7	6	98	100	0	86	0	14	66	34	0	90	2	7	18	61	20	16
8	K-1	119	84	16	98	0	2	94	6	0	95	1	4	22	78	0	25
9	1-4	280	59	41	100	0	0	100	0	0	96	1	2	72	24	5	194
10	K-6	143	73	27	68	32	0	96	4	0	84	12	4	59	33	8	71
11	K-6	144	83	17	94	0	6	100	0	0	100	0	0	46	44	11	66

1 Degree of contact indicates the access that students have to an instructor (High = studnet in direct contact with instructor; Medium = student is monitored by instructor but not directly instructed; Low = instructor working with another student or group of students).

2 This set of categories indicates the instructor with whom the student has the highest degree of contact.

3 This column gives an estimate of ALT in Reading, Language Arts, and Mathematics (combined based on the target students only.

in reading, language arts, and mathematics (shown in the first column under the "Content" category) represents the total time per day observed in those content areas. Note that the kindergarten classes are relatively low (these classes are half-day programs). The other two "Content" columns indicate the percent of observed time that was allocated to reading/language arts and mathematics, respectively.

The columns under the "Degree of Contact" category present the average percent of total observed time during which the target students had high, medium, and low contact with an instructor. The columns under the "Instructor" category indicate the percent of observed time during which the target students were supervised by the teacher, an aide, or another adult instructor. For Class 1, approximately three quarters (69%) of the observed time in basic skills was allocated to reading/language arts. The remaining 31 percent of the basic skills time was spent on mathematics. Sixty-six percent of the total observed time in basic skills was spent with target students in high contact (discussion, recitation-like, direct instruction activities) with an instructor. For 34 percent of the time, the target students had easy access to the instructor but were not being directly instructed and at no time did the target students work on their own while the teacher worked with a different group (or was "unavailable" for some other reason). For Class 1, the highest degree of contact was always provided by the teacher (98%).

Columns under the "Engagement" category report target student engagement. For example, target students in Class 1 were academically engaged in basic skills activities for 86 percent of the time, were not engaged for 4 percent of the time, and engaged in interim activities for 8 percent of the time.

Columns under the "Level of Accuracy" category present the percent of time target students spent on tasks at three different levels of accuracy. On the average, target students in Class 1 spent 100 percent of the observed time in basic skills on high accuracy tasks and zero percent on medium and low accuracy tasks.

The final column in Tables 3.19 and 3.20 gives an estimate of the average ALT (in minutes) for the target students during the observed instruction in reading, language arts, and mathematics. For Class 1, target students averaged 76 minutes of ALT per day in the basic skills content areas. The estimate of ALT is derived by multiplying each of the entires in Columns 3, 12, and 15. Note that there is considerable variation in the "class" averages for ALT. The relatively low ALT figures for Classes 2, 4, and 10 are the result of the low accuracy percents. Thus, although students can spend a good deal of time working on basic skills and are engaged in such tasks, the low degree of accuracy counterbalances these figures to cause limited average ALT.

Table 3.19 has been used to describe ALT data for Site 7. The interpretation of descriptive data for Site 9 may be made in a similar

fashion from Table 3.20.

Summary

Target students at Sites 7 and 9 received relatively large allocations of time to basic skills instruction (172 and 117 minutes respectively). Engagement rates were high at both sites (77 percent and 93 percent); and percent time on high accuracy tasks was moderately high (56 percent and 55 percent). The product of the average engagement rate and average percent time on high accuracy tasks provides an interesting conversion rate between allocated time and academic learning time for the target students. The products for Sites 7 and 9 are .43 and .51 respectively. Thus for each hour of time allocated to basic skills instruction, students at Site 7 accumulated approximately 26 minutes of academic learning time while target students at Site 9 accumulated 31 minutes of academic learning time. When allocated time is taken into account, students at Sites 7 and 9 accumulated approximately 74 minutes and 60 minutes of academic learning time per day.

Student Instructional Participation Characteristics

The purpose of this section is to examine Student Instructional Participation Characteristics (SIPC) for the sample of students at Sites 7 and 9. Using the rating scale described in Chapter One, teachers at both sites rated their whole class prior to data collection. At Site 9, however, additional ratings were made of the subsample of target students after data collection had been completed. Thus information on how student participation changed over time was available at Site 9. In this section, a description of student participation for the total sample by site is presented, followed by the ratings across time at Site 9.

Type I participants are success-oriented students who may be capable of carrying out more than one task simultaneously. They like to work alone, seldom interrupt others or seek help, but know how to initiate interactions with the teacher or others if help is necessary. Type II participants are also oriented toward success, but are more social and enjoy frequent interactions with classmates and the teacher. Type III students are dependent on others, and require feedback and assistance if they are to accomplish instructional tasks successfully. Type IV students attend to tasks, but with little or no active involvement; they seldom volunteer answers or initiate interactions. Type V students frequently isolate themselves from the classroom activities, and are only sporadically engaged in instructional tasks. Type VI students tend to be disruptive and act out during instructional time. These last two types are to some extent "deviant" participators.

Table 3.21 presents information on the frequencies of Student Instructional Participation Characteristics (SIPC) at Site 7.

Table 3.21

Frequencies of SIPC Categories: Site 7, Time 1

Class	Grade Level	Nominal Class Size	SIPC						
			I	II	III	IV	V	VI	VII
1	K	15	3	2	1	4	4	1	0
2	2	24	9	3	2	6	2	1	1
3	3-4	17	7	4	3	1	2	0	0
4	6-7	8	1	2	1	1	2	0	1
5	K	21	10	6	0	5	0	0	0
6	1	12	2	4	1	3	0	0	2
7	3-5	15	5	5	1	0	0	1	3
8	2	21	4	3	1	3	6	3	1
9	1	22	3	4	7	5	3	0	0
10	3-4	24	12	1	2	2	0	2	5
SITE TOTALS		179	56	34	19	30	19	8	13

Note: It is possible for a student to be classified as more than one type.

Comparable information for Site 9 is given in Table 3.22. Note that these tables allow for multiple classifications, so that one student may be represented as more than one type.

At Site 7, out of a total of 179 students rated by teachers, 166 were subsequently categorized into one of the six participation types. Most of the students (54%) were categorized as either Type I or Type II, those most closely associated with successful participation. Only 16 percent of the students were classed as Type V or Type VI, the least successful types.

At Site 9, out of 237 ratings, 217 could be classified. Nearly 60 percent of these fell into Type I or II, and only 23 percent in Type V or VI. Thus a pattern similar to that found at Site 7 emerged.

At Site 9, teachers rated target students on two occasions, once prior to data collection in January, and once after data collection. The second rating was conducted at a teacher analysis meeting in which teachers read and analyzed several data sets. Tables 3.23 and 3.24 present ratings done on those two occasions, Time 1 and Time 2.

The results of this analysis are presented in Figure 3. The six participation types are presented across the bottom of the figure in Roman numerals. Along the vertical axis, the proportion of students who were categorized in each style is given. The bar graph shows the proportion of students at Time 1 (January) and Time 2 (June) and their participation type.

The results show that the students across time moved in a more success-oriented direction. Type I increased from 8 percent to 15 percent and Type II remained high both times at 40 percent. The proportion of Type III target students decreased from 10 percent to 8 percent. Type IV students increased from 10 percent to 15 percent, while Type V students decreased from 35 percent to 24 percent. No Type VI student was found at either time, which indicates that, on the whole, students moved away from the more negative participation types. Across all the participation types, the comparison of Time 1 with Time 2 data indicates that the students at Site 9 were moving towards more success-oriented participation types.

The data obtained through Verification Substudy I-A are summarized and discussed more fully in Chapter 6.

Table 3.22

Frequencies of SIPC Categories: Site 9, Time 1

Class	Grade Level	Nominal Class Size	SIPC						
			I	II	III	IV	V	VI	VII
1	1-5	13	6	1	1	1	4	0	0
2	5-6	17	0	16	0	1	0	0	0
3	2-6	20	1	9	0	1	2	5	2
4	1-2	39	6	9	6	5	5	4	4
5	5	15	0	6	1	1	3	1	3
6	2	21	7	3	3	4	2	0	2
7	6	11	0	0	0	0	8	1	2
8	1	23	3	2	0	5	9	2	2
9	1-4	46	4	30	4	6	0	0	2
10	6	10	0	4	0	2	3	0	1
11	6	22	5	11	0	4	0	0	2
SITE TOTALS		237	32	91	15	30	36	13	20

Note: It is possible for a student to be classified as more than one type.

Table 3.23

Frequencies of SIPC Categories for Target Students: Site 9, Time 1

Class	Grade Level	Nominal Class Size	SIPC						
			I	II	III	IV	V	VI	VII
1	1-5	4	1	1	0	0	2	0	0
2	5-6	4	0	4	0	0	0	0	0
3	2-6	4	0	2	0	0	1	0	1
4	1-2	4	0	1	1	1	1	0	0
5	5	4	0	1	0	1	1	0	1
6	2	4	0	4	0	0	0	0	0
7	6	4	0	0	0	1	3	0	0
8	1	4	0	0	0	1	3	0	0
9	1-4	4	0	2	1	0	1	0	0
10	6	4	1	1	0	0	2	0	0
11	6	4	1	1	2	0	0	0	0
SITE TOTALS		44	3	17	4	4	14	0	2

Note: It is possible for a student to be classified as more than one type.

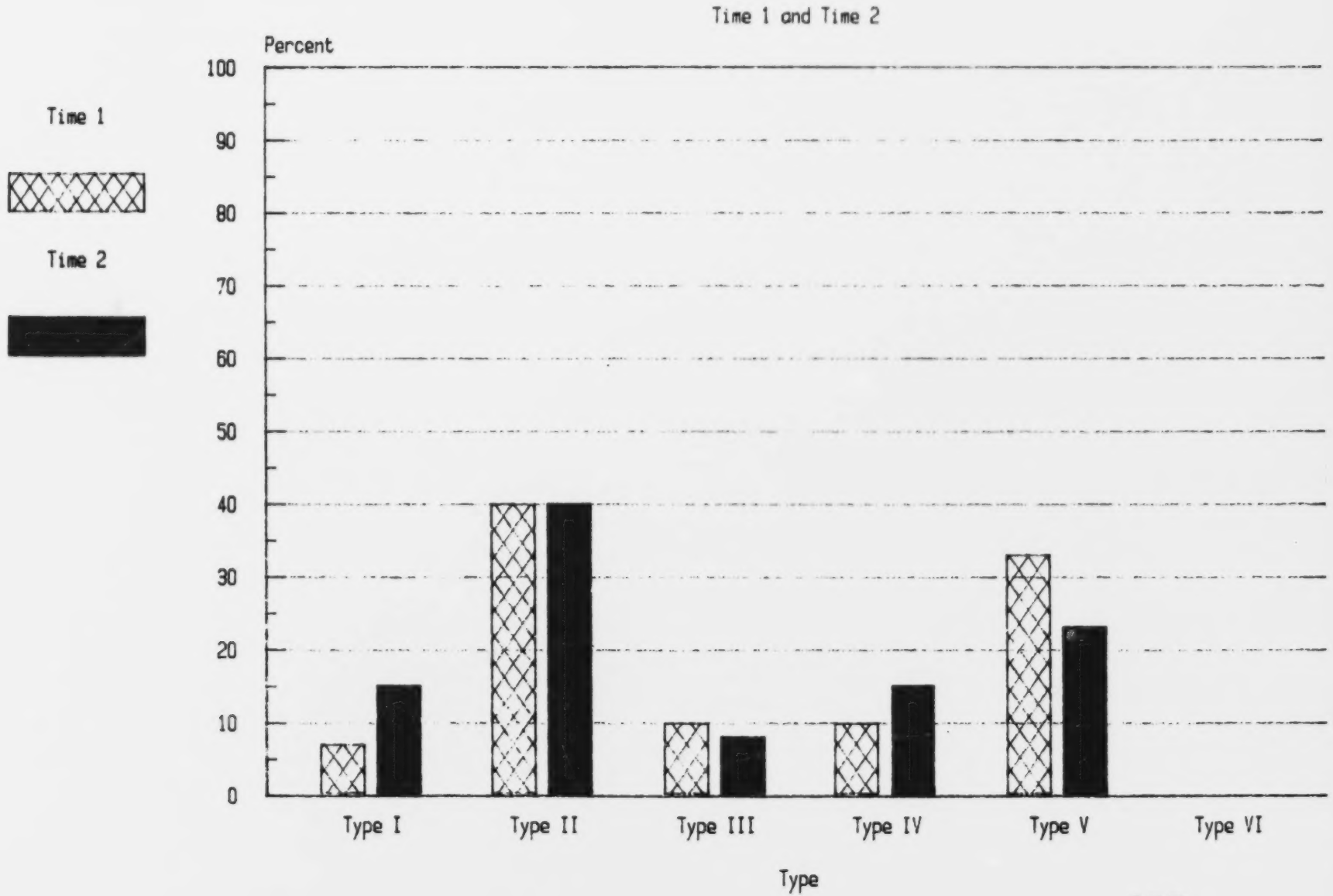
Table 3.24

Frequencies of SIPC Categories for Target Students: Site 9, Time 2

Class	Grade Level	Nominal Class Size	SIPC						
			I	II	III	IV	V	VI	VII
1	1-5	4	1	1	1	0	0	0	1
2	5-6	4	1	3	0	0	0	0	0
3	2-6	4	0	2	0	0	1	0	1
4	1-2	4	0	1	2	1	0	0	0
5	5	4	0	0	0	0	2	0	2
6	2	4	1	3	0	0	0	0	0
7	6	4	0	0	0	0	4	0	0
8	1	4	3	0	0	0	1	0	0
9	1-4	4	0	3	0	1	0	0	0
10	6	4	0	1	0	2	1	0	0
11	6	4	0	2	0	2	0	0	0
SITE TOTALS		44	6	16	3	6	9	0	4

Note: It is possible for a student to be classified as more than one type.

Figure 3. Student participation at Site 9.



CHAPTER FOUR

METHODOLOGY FOR SUBSTUDY I-B

The question examined in Verification Substudy I-B was whether the features identified as significant during Part I of the SBIF study would characterize the instruction of LEP students in general, that is, in classes that were not nominated as successful.

This chapter describes the methodology used in Substudy I-B and is divided into three sections. The first is a description of the sample for the study. The second section provides information on the data sources for the study, and the third is a description of the analysis procedures followed in the study. The methodology for Substudy I-B was very similar to that for Substudy I-A. Therefore the content of this chapter overlaps in many areas the methodology description of I-A in Chapter Two.

Description of the Sample

This section describes the teacher and student samples for Substudy I-B including (a) a description of the sample selection process, and (b) characteristics of the sample of classes.

Sample Selection Process

For Substudy I-B, instruction was examined in a sample of settings and classrooms which had not been nominated as successful. This was in contrast to the sample for Substudy I-A in which all the classrooms had been nominated as successful by bilingual education constituents. While these new Substudy I-B classrooms were not nominated as successful, neither were they identified as being unsucessful. Prior to data collection, little was known about the relative effectiveness of these particular teachers.

The sample selection process had two facets. First, 36 non-nominated classrooms were included at the five sites from Part I. The vast majority of these classes were obtained by following target students who had participated in Part I into new classrooms. If students were assigned to teachers who had been part of the Part I sample, that class was not included in Substudy I-B. This procedure allowed for the inclusion of ESL and monolingual classes in addition to bilingual classes. Second, a sample of unnominated classrooms was identified at a new site (Site 8). In order to provide a wider sample and ensure ethnolingustic variation, five classrooms serving Vietnamese students and five serving Hispanic students were identified at Site 8.

Thus the total sample of classes for Substudy I-B was 46.

Both at the continuing sites and at the new site, four target students were selected from each of the classrooms. If a student had been a target in Part I, he or she was automatically included. New target students were selected in the same manner as in Substudy I-A (see Chapter Two).

Characteristics of Class Sample

Information on the characteristics of each class in the sample at each of the I-B sites is contained in Table 4.0. Data presented in Table 4.0 include grade level, class size, number of students by sex, and number of students for each of the four oral language proficiency levels. Ratings on oral proficiency in English and the students' home language (L1) were collected for each student in each class. The rating for the student's home language is shown in parentheses in Table 4.0.

To obtain the language ratings, teachers were asked to rate each of their students on a four-point scale of oral language proficiency (after Fuentes & Weisenbaker, 1979). The four levels are:

Level 1: Student neither speaks nor understands the language;

Level 2: Student understands some fundamental language;

Level 3: Student speaks and understands fundamental language sufficiently to participate in elementary conversations; and

Level 4: Student has reasonable command of the language.

For example, Class 12 at Site 1 was a combination grades 2-3 class containing 17 students, 11 of whom were boys and 6 of whom were girls. Of these 17 students, 3 were at oral English language proficiency Level 1, 2 were at Level 2, 12 were at Level 3, and none was at Level 4. With regard to L1 language proficiency, no students were at Level 1, 4 students were at Level 2, 7 were at Level 3, and 6 were at Level 4. Thus, most students had a rudimentary command of oral English in addition to being in the upper ranges of their L1 oral proficiency. This description depicts the context for bilingual instruction and assists in interpreting data that follow, particularly regarding uses of L1 and L2 for instruction. One might expect, for instance, that a class with many students of Level 3 English proficiency would require less instructional focus on developing English language skills and the delivery of instruction in L1 than would a class with many students at Levels 1 and 2. Comparable descriptions can be developed from Table 4.0 for each of the classes in Substudy I-B.

Table 4.0 also provides data for site level descriptions. At Site 1, there were six classes in the Substudy I-B sample with a total of 149 students, 90 of whom were male and 59 of whom were female. Oral

Table 4.0

Nominal Class Size, Sex, and Oral English and L1 Language Proficiency of I-B Student Sample: Site 1

Class	Grade Level	Nominal Class Size	Sex		Oral English (and L1) Language Proficiency			
			Male	Female	Level 1	Level 2	Level 3	Level 4
12	2-3	17	11	6	3 (0)	2 (4)	12 (7)	0 (6)
16	3-4	21	9	12	0 (3)	7 (4)	9 (9)	5 (5)
17	1	36	22	14	3 (0)	24 (3)	7 (32)	0 (1)
18	5-6	20	13	7	1 (0)	0 (1)	13 (2)	2 (17)
20	1	35	17	18	7 (6)	12 (12)	15 (12)	1 (2)
21	1-2	20	18	2	2 (4)	1 (7)	7 (7)	10 (0)
Site Totals		149	90	59	16 (13)	46 (31)	63 (69)	18 (31)

Table 4.0 (continued)

Nominal Class Size, Sex, and Oral English and L1 Language Proficiency of I-B Student Sample: Site 2

Class	Grade Level	Nominal Class Size	Sex		Oral English (and L1) Language Proficiency			
			Male	Female	Level 1	Level 2	Level 3	Level 4
1	3	22	10	12	6 (-)	8 (-)	8 (-)	0 (-)
2	k	23	11	12	15 (1)	5 (0)	1 (0)	2 (22)
3	1	24	10	14	1 (0)	0 (0)	20 (0)	3 (21)
6	4	35	15	20	8 (0)	11 (0)	0 (0)	16 (31)
7	4	34	16	18	7 (0)	9 (0)	11 (0)	7 (34)
8	1	24	17	7	14 (0)	2 (0)	8 (0)	0 (24)
9	5	23	8	15	5 (0)	0 (7)	0 (7)	18 (9)
10	1	23	12	11	7 (0)	4 (0)	4 (4)	8 (11)
11	1	23	10	13	1 (0)	3 (0)	8 (0)	11 (14)
12	6	32	14	18	0 (0)	16 (2)	2 (0)	14 (24)
Site Totals		263	123	140	64 (1)	58 (9)	62 (11)	79 (190)

Note: "-" denotes missing values.

Table 4.0 (continued)

Nominal Class Size, Sex, and Oral English and L1 Language Proficiency of I-B Student Sample: Site 3

Class	Grade Level	Nominal Class Size	Sex		Oral English (and L1) Language Proficiency			
			Male	Female	Level 1	Level 2	Level 3	Level 4
4	5	8	4	4	0 (0)	0 (0)	1 (0)	7 (8)
9	2	9	5	4	0 (0)	0 (0)	0 (3)	9 (4)
10	3	11	6	5	0 (0)	1 (0)	2 (0)	6 (11)
11	1	9	6	3	3 (0)	5 (0)	1 (0)	0 (9)
12	3	10	5	5	0 (0)	0 (0)	1 (1)	9 (9)
13	3	14	11	3	0 (0)	0 (0)	5 (0)	9 (14)
14	6	8	2	6	0 (0)	3 (0)	5 (0)	0 (8)
Site Totals		69	39	30	3 (0)	9 (0)	15 (4)	40 (63)

Table 4.0 (continued)

Nominal Class Size, Sex, and Oral English and L1 Language Proficiency of I-B Student Sample: Site 4

Class	Grade Level	Nominal Class Size	Sex		Oral English (and L1) Language Proficiency			
			Male	Female	Level 1	Level 2	Level 3	Level 4
3	3	16	6	10	0 (7)	3 (0)	5 (2)	8 (6)
6	2	15	8	7	0 (2)	3 (7)	6 (1)	6 (5)
7	4	20	10	10	0 (3)	0 (1)	9 (5)	11 (11)
9	1	23	10	13	0 (5)	0 (6)	3 (2)	20 (10)
10	1	21	11	10	0 (8)	8 (1)	6 (1)	7 (11)
11	2	15	5	10	0 (0)	11 (11)	2 (2)	2 (2)
12	6	20	13	7	1 (0)	3 (0)	6 (0)	10 (20)
Site Totals		130	63	67	1 (25)	28 (26)	37 (13)	64 (65)

Table 4.0 (continued)

Nominal Class Size, Sex, and Oral English and L1 Language Proficiency of I-B Student Sample: Site 5

Class	Grade Level	Nominal Class Size	Sex		Oral English (and L1) Language Proficiency			
			Male	Female	Level 1	Level 2	Level 3	Level 4
11	1	32	21	11	7 (0)	11 (0)	11 (0)	3 (32)
14	2	27	14	13	0 (0)	2 (0)	4 (0)	21 (1)
16	1	29	10	19	1 (0)	4 (0)	19 (6)	5 (14)
18	4	31	18	13	2 (1)	7 (1)	7 (6)	15 (20)
21	k	29	14	15	5 (0)	5 (0)	10 (4)	9 (12)
22	k	30	12	18	2 (0)	7 (0)	8 (0)	13 (0)
Site Totals		178	89	89	17 (1)	36 (1)	59 (16)	66 (79)

Table 4.0 (continued)

Nominal Class Size, Sex, and Oral English and L1 Language Proficiency of I-B Student Sample: Site 8

Class	Grade Level	Nominal Class Size	Sex		Oral English (and L1) Language Proficiency			
			Male	Female	Level 1	Level 2	Level 3	Level 4
1	2	22	10	12	5 (0)	7 (0)	5 (3)	5 (14)
2	1	22	7	15	2 (0)	8 (2)	5 (4)	7 (10)
3	3	23	11	12	0 (0)	2 (0)	4 (0)	17 (7)
4	3-4	25	11	14	0 (0)	6 (1)	7 (2)	12 (14)
5	5-6	33	19	14	0 (1)	5 (5)	8 (5)	20 (3)
6	4-5	24	9	15	1 (2)	2 (1)	3 (1)	18 (5)
7	5-6	22	10	12	0 (0)	2 (2)	0 (1)	20 (9)
8	1-2	20	8	12	4 (4)	3 (2)	0 (1)	13 (4)
9	2-3	19	10	9	2 (0)	3 (0)	0 (5)	14 (6)
10	5-6	28	6	22	1 (2)	0 (3)	3 (4)	24 (4)
Site Totals		238	101	137	15 (9)	38 (16)	35 (26)	150 (76)

English proficiency (OEP) ratings were obtained for 143 of those 149 students and oral non-English proficiency (ONEP) ratings for 144 of the students. Of those students for whom ratings were obtained, 16 (or 11%) were at oral English proficiency Level 1, 46 (or 32%) were at Level 2, 63 (or 44%) were at Level 3, and 18 (or 13%) were at Level 4. These data indicate that most of the students (76%) in the Site 1 I-B sample were categorized by their teachers at the mid-range English proficiency levels of 2 and 3. The majority of students in the sample at this site were rated at Level 3 in their home language (69 students, or 48%), while the numbers of students at Levels 2 and 4 in their L1 were equally divided (31 students, or 22%, at each level). The fewest students (13, or 9%) were categorized at Level 1 in their home language.

Site 2 had the largest number of students participating in Substudy I-B. At this site, there were 10 classes with a total of 263 students, 123 of whom were male and 140 of whom were female. Oral English proficiency ratings were obtained for all of the students in the Site 2 I-B sample. The proportion of students at each OEP level was fairly similar at this site: 64 students (or 24%) at Level 1, 58 students (or 22%) at Level 2, 62 students (or 24%) at Level 3, and 79 students (or 30%) at Level 4. There was considerable disparity, however, in the proportions of students at each ONEP level. Of the 211 students for whom ONEP ratings were obtained, 1 (0%) was at Level 1, 9 (4%) were at Level 2, 11 (5%) were at Level 3, and 190 (90%) were at Level 4. It appears from these data that a variety of English proficiency levels were represented in this site sample and that a large proportion of these students were considered by their teachers to be at a high level of L1 proficiency.

The Substudy I-B sample at Site 3 comprised 7 classes and 69 students, 39 of whom were male and 30 of whom were female. OEP and ONEP ratings were obtained for 67 of the 69 students in the sample. At this site, a large proportion of the students were rated by their teachers at Level 4 in both English and L1; 40 students (or 60%) were at OEP Level 4 and 63 (or 94%) were at ONEP Level 4. Although these two categories do not necessarily overlap, it is apparent that there was a significant number of students in this particular sample who were considered bilingual by their teachers. Very few students (3 students or 4%) were rated at OEP Level 1 and no students were rated at ONEP Levels 1 or 2.

The Site 4 I-B sample consisted of 7 classrooms and 130 students. Of these, 63 students were male, 67 were female. OEP ratings were obtained for all the students in the sample, ONEP ratings were obtained for all but one student. A large proportion of the students in this sample were rated at the highest OEP level of 4 (64 students (or 49%). Similarly, 65 students (or 50%) were rated at the highest ONEP level of 4. Only 1 student (1%) was given the lowest OEP rating of Level 1, while 25 students (19%) received an ONEP rating of 1. The mid-range proficiency levels of 2 and 3 were about evenly represented with 28 students (22%) at OEP Level 2, 37 students (28%) at OEP Level 3, 26 students (20%) at ONEP Level 2, and 13 (10%) at ONEP

Level 3. It seems apparent from these data that at this site the sample of students was considered fairly strong in English, especially in comparison to L1.

The I-B sample at Site 5 was composed of 6 classes with 178 students, evenly divided between males and females. OEP ratings were obtained for all the students in the sample and were divided among the four proficiency levels this way: 17 students (or 9%) at Level 1, 36 students (or 20%) at Level 2, 59 students (or 33%) at Level 3, and 66 students (or 37%) at Level 4. ONEP ratings were obtained for 97 of the 178 students. Of those 97 students, 1 (1%) was at Level 1, 1 was at Level 2, 16 (16%) were at Level 3, and 79 (81%) were at Level 4. This student sample appeared to be fairly strong in English, with 125 students (70%) in the upper proficiency levels of 3 and 4. Although the data for ONEP ratings were not complete, the students in this sample seemed to be strong in L1 as well since only 18 students (19%) of those for whom ratings were obtained were categorized in the lower proficiency levels of 1, 2, and 3.

The second largest site sample for Substudy I-B was at Site 8, where there were 10 classes and 238 students. There were 101 males and 137 females. OEP ratings were obtained for all the students, while ONEP ratings were obtained for 127 of the 238 students. The proportion of students at each OEP level was: 15 students (6%) at Level 1, 38 students (16%) at Level 2, 35 students (15%) at Level 3, and 150 students (63%) at Level 4. Although fewer ONEP ratings were obtained, the proportional breakdown by language proficiency levels for ONEP was similar to that for OEP: 9 students (7%) at Level 1, 16 students (13%) at Level 2, 26 students (20%) at Level 3, and 76 students (60%) at Level 4. It does appear that many students in the Site 8 sample were considered by their teachers to be bilingual.

A summary of the data presented in Table 4.0 shows that the total Substudy I-B sample consisted of 46 classes with 1027 students at six sites. There were 505 male students and 522 female students. Oral English proficiency ratings were obtained for 1019 students (99%) and oral non-English proficiency ratings for 775 students (75%). Of the 1019 students for whom OEP ratings were obtained, 116 (11%) were at the lowest proficiency level of 1, 215 (21%) were at Level 2, 271 (27%) were at Level 3, and 417 (41%) were at the highest proficiency level of 4. Of the 775 students for whom ONEP ratings were obtained, 49 (6%) were at the lowest proficiency level of 1, 83 (11%) were at Level 2, 139 (18%) were at Level 3, and 504 (65%) were at the highest proficiency level of 4.

Data Sources

This section describes the data sources used in Substudy I-B. Data were collected on three types of variables: 1) classroom context variables; 2) instructional process variables; and 3) student variables.

Classroom Context Variables

Four dimensions of classroom content were described through use of the Activity Structures Procedure (ASP) developed for the study: time allocated to basic skills (minutes per day); proportion of school day in one instructional group; proportion of the school day where 2/3 or more of the students work directly with the teacher; and proportion of the school day when one instructor is present. Information was collected through direct observation using the coding procedures designed for that purpose. Trained observers coded classroom activities at regular intervals three times during the school day for four days. For detailed information on the coding procedures, see Training Manual for Data Collection: SBIF Study (document SBIF-81-R.6-C).

Instructional Process Variables

Allocation of time. Data on teachers' allocation of time during instruction were obtained through direct observation and coding during two full days in each classroom. Observers focused their attention on the teacher alone, coding changes (and noting times) in subject matter and the amount of time the teacher spent in L1 or English. From this, the proportion of L1 during basic skills instruction could be computed. A complete description of the data collection procedures can be found in the Training Manual for Data Collection: SBIF Study (document SBIF-81-R.6-C).

Active teaching. The data on active teaching were derived from observer ratings of 13 teacher behaviors using a five-point scale. Observers had the opportunity to see each teacher in a variety of instructional situations over several days of observation. As a result, each observer became familiar with the general characteristics of instruction in each classroom. At the end of the data collection, all data collectors who observed in a given classroom met to prepare a consensus rating for the active teaching behaviors. Details of data collection procedures for active teaching are contained in the Training Manual for Data Collection: SBIF Study (document SBIF-81-R.6-C).

Student Variables

Two types of data were collected on student behavior: academic learning time and instructional participation type.

Academic learning time (ALT). Academic learning time (ALT) was assessed by directly observing target students during reading, language arts, and mathematics instruction. The ALT observation system calls for the observer to focus on one target student for a moment, code that student's behavior on a series of categories, then focus on a second target student and code that student's behavior. As a result, for any observation period, coding was done about every three minutes for each target student. The student variables observed were broken down into the following: student engagement rate in basic skills, percent student time on high accuracy tasks in basic skills, and

estimated academic learning time during basic skills (minutes per day). Information regarding data collection for academic learning time is presented in the Training Manual for Data Collection: SBIF Study (document SBIF-81-R.6-C).

Instructional participation type. Over time, students develop patterns of behavior in their classroom participation. Prior to data collection in each part of the SBIF study, teachers were asked to rate each student's performance according to the 21 behaviors used in the classification scheme. These data were then scored and frequency distributions by type calculated. For detailed information on the data collection procedures, see Training Manual for Data Collection: SBIF Study (document SBIF-81-R.6-C).

Based on prior research and classroom observations, Ward (1982) categorized student participation patterns into six types. These were utilized for the SBIF descriptive study, and a brief description of each follows. Type I participants are success-oriented students who may be capable of carrying out more than one task simultaneously. They like to work alone, seldom interrupt others or seek help, but know how to initiate interactions with the teacher or others if help is necessary. Type II participants are also oriented toward success but are more social and enjoy frequent interactions with classmates and the teacher. Type III students are dependent on others, and require feedback and assistance if they are to accomplish instructional tasks successfully. Type IV students attend to tasks, with little or no active involvement; they seldom volunteer answers or initiate interactions. Type V students frequently isolate themselves from the classroom activities, and are only sporadically engaged in instructional tasks. Type VI students tend to be disruptive and act out during instructional time. These last two types are to some extent "deviant" participators.

Analysis Procedures

The guiding question for Substudy I-B was: Do the features identified in Part I also characterize bilingual instruction in a sample of classes that were not nominated as successful? Analysis was conducted at a descriptive level and in two stages. First, frequency distributions were obtained for each of the variables described above (classroom context, instructional process, and student) and presented by site.

Next, teachers were grouped on the basis of the differential use of L1. A significant bilingual instructional feature identified in Part I of the study was the teachers' use of English and the students' first language. At a minimum, this should mean that a certain portion of the instructional day was devoted to use of L1, for whatever purpose. In other words, the teacher had to be speaking L1 part of the time. It can be argued further that a critical variable in the school experiences of a limited English proficient student is the relative amount of L1 used by his or her teacher. For many LEP stu-

dents, understanding of basic lesson content will depend on whether or not teachers speak their language.

In order that we might explore this possibility, classes were grouped according to the average proportion of class time each teacher allocated to L1. Four groups were arbitrarily defined as: (a) classes with no use of L1; (b) classes with 10 percent or less; (c) classes with 11 to 25 percent; and (d) classes that used L1 more than 25 percent of the time in basic skills instruction. While these criteria may appear low, it should be reiterated that data were only from basic skills lessons; music, art, and transitions, for example, were excluded. As with the site-level analyses, frequency distributions for each variable were calculated for each group of classes.

CHAPTER FIVE

RESULTS OF SUBSTUDY I-B

This chapter reports the results of Verification Substudy I-B: an examination of instruction in 36 classrooms at the five continuing sites and 10 classrooms at one new site. The overriding question in this substudy was whether the features identified in Part I also characterize bilingual instruction in a sample of classes not nominated as successful. Analysis was conducted in two stages, a site-level comparison and an examination of classes differentiated on the basis of their use of the students' native language (L1) during basic skills instruction. The results of each analysis are presented separately.

Site-level Comparisons

For the site-level comparisons, frequency distributions for each of the study variables were calculated by site. The results of these analyses are presented by site in Tables 5.0 through 5.11. The variables analyzed and listed in the tables were of three types: classroom context, instructional process, and student.

The classroom context variables were derived from the activity structures procedure (ASP) and included (a) the amount of time allocated to basic skills instruction in minutes per day; (b) the proportion of the school day in which whole-group instruction was employed; (c) the proportion of the school day in which two thirds or more of the students were working directly with the teacher; and (d) the proportion of the school day when only one instructor was present. Two measures of instructional process were included: the average active teaching rating and the proportion of basic skills instruction in which the teacher used the students' L1. Student variables were from two sources: academic learning time (ALT) observations and teacher ratings of students' participation. The ALT variables included (a) students' engagement rate in basic skills; (b) the proportion of basic skills time in which students performed at a high rate of accuracy; (c) the product of the first two variables; and (d) estimated academic learning time in minutes per day. Student participation was rated on two occasions each year so that evidence for change in type over time was available. Note that in Part I, multiple categorization of students was allowed, so that the data represent "number of classifications" rather than number of students.

Tables 5.0 through 5.9 present data from both Part I and Part II of the study. For both Parts I and II, results for each variable are presented as the average across all classrooms at each site. The Part I results are based on data collected in the 1980-81 school year in a sample of classrooms that were nominated by local constituents as

successful bilingual settings. For Part II, results are based on the sample of unnominated classes for Substudy I-B selected at each site. The results from each site are discussed in turn.

Site 1: New York

Results from Site 1 (New York) are given in Tables 5.0 and 5.1. The first classroom context variable, time allocated to basic skills, showed a striking difference across the two samples of classes. In the Part II sample, an average of 185 minutes per school day were allocated to basic skills instruction as opposed to 109 minutes per day in the first year. While there was a range of about 80 minutes per day in the Part I sample, the limits in the Part II sample were about 100 minutes per day higher. These findings are tempered, however, by the fact that the Part I sample included kindergarten classes and the Part II sample did not. Kindergarten classes typically have half-day programs and therefore allocate less time to curricula areas. Other classroom context variables were comparable across the samples.

Instructional process variables included active teaching ratings and the proportion of basic skills instruction in L1. For the first of these, the Part II sample was rated somewhat lower than that of Part I (3.8 compared to 4.6). In this case, it appears that the less purposive selection process used in Part II yielded at least some teachers who did not practice active teaching behaviors to a high degree. For both samples, there was a wide range in the proportion of L1 used (approximately 70 percentage points each year). On the average, teachers used the students' language about one third of the time.

Student variables showed the following patterns. Of the four ALT variables, three were lower in the Part II sample. Students' performed at a high level of accuracy during basic skills less than 30 percent of the time in Part II, as against 64 percent in Part I. The range in Part II on percent time on high accuracy tasks and the product of the engagement rate and percent time high accuracy was entirely outside that of the Part I sample. The overall estimated ALT was also somewhat lower in the unnominated sample of classes. In Part II, an average 42 minutes per basic skills day were spent in academic learning time, while in the Part I sample, the figure was 56 minutes. One overall finding from Part I was that, over time, student participation tended to move toward the more positive student participation types (Type I and II), and away from the least desirable (Types V and VI). This change is evident in the Part I results presented in Table 5.1 for Site 1. At Time B, a greater proportion of classifications were Type I and II, and a smaller proportion Types V and VI. Similarly, in Part II, the proportion of Type II students increased, while the proportion of Type VI students went down.

Table 5.0

Classroom Context, Instructional Process, and Student Variables
for Part I and Part II Classes at Site 1

Variables	Part II Sample			Part I Sample		
	Number of Classes	Average	(Range)	Number of Classes	Average	(Range)
Classroom Context						
Time allocated to basic skills (min/day)	6	185	(155-234)	9	109	(57-135)
Porportion of school day in one instructional group	6	.65	(.36-.95)	9	.58	(.20-1.00)
Proportion of school day > 2/3 students work directly with teacher	6	.60	(.13-.84)	9	.66	(.40-.97)
Proportion of school day when one instructor is present	6	.59	(.00-1.00)	9	.66	(.22-1.00)
Instructional Process						
Average active teaching rating (scale 1-5)	6	3.8	(2.5 - 4.7)	9	4.6	---
Proportion Ll during basic skills instruction	6	.31	(.01-.73)	9	.33	(.09-.82)
Student						
Student engagement rate in basic skills	6	.79	(.73-.90)	9	.78	(.63-.93)
Student proportion high accuracy during basic skills	6	.29	(.16-.40)	9	.64	(.50-.82)
Student engagement rate X proportion high accuracy in basic skills	6	.23	(.14-.34)	9	.50	(.36-.67)
Estimated academic learning time (minutes of basic skills/ day)	6	42	(26-61)	9	56	(21-90)

Table 5.1

Categorization of Students by Participation Type
at Two Points in Time from Part I and Part II: Site 1

Participation Type	Part II Sample				Part I Sample*			
	Time A		Time B		Time A		Time B	
	Number of Students	Proportion of Sample	Number of Students	Proportion of Sample	Number of Students	Proportion of Sample	Number of Students	Proportion of Sample
Type I	19	.15	1	.12	8	.16	12	.23
Type II	26	.20	4	.50	8	.16	11	.21
Type III	17	.13	2	.25	4	.08	4	.08
Type IV	30	.23	0	.00	4	.08	6	.11
Type V	14	.11	1	.12	17	.35	14	.26
Type VI	18	.14	0	.00	8	.16	6	.11
Uncategorized	5	.04	0	.00	0	.00	0	.00

*Note: Allows for multiple categorization.

Site 2: Florida

The classroom context, instructional process, and student variables for Site 2 are shown in Table 5.2. At Florida, classroom context variables showed a rather different pattern across the two samples. The average amount of time allocated to basic skills was somewhat higher in the Part II sample, but given that the Part II sample included only one kindergarten class, and the Part I sample had four kindergarten classes, this difference would not appear to be significant. Whereas the ranges on allocated time in New York did not overlap, in Florida the Part II range encompasses that of Part I. The proportion of the school day in which students worked directly with the teacher was somewhat less in Part II, while the time with one instructor present was somewhat higher than in Part I.

One instructional process variable, the average active teaching rating, was the same in both samples (4.0). The other variable, the proportion of students' language used in basic skills, increased from Part I to Part II. In the first year, teachers at Florida used L1 from zero to 35 percent of the time for an average of 11 percent; in the second year sample, teachers' L1 use ranged from 13 to 100 percent for an average of 41 percent. These findings indicate that teachers in both samples used active teaching practices, but varied considerably in the degree to which they used the first language of their students.

Students' engagement rates in basic skills were roughly comparable across the samples for the two years. In Part I, students were estimated to be engaged an average of 73 percent of the time in basic skills instruction, while in Part II students were engaged 81 percent of the time. Comparisons of students' proportion of time on high accuracy tasks at the Florida site are not possible because in the first year there were too few coding occasions to provide stable estimates. Student participation ratings in Part I showed a trend toward Type I and Type II classifications. Despite a small sample at Time B in Part II, it appears that a high proportion of students were classed as the more positive types (see Table 5.3).

Site 3: Texas

The results from the Texas site (Table 5.4) showed very few differences across the Part I and Part II samples. In regard to classroom context variables, only the time allocated to basic skills instruction appeared to vary; the average for Part I was 205 minutes per day and the average for Part II, 232 minutes per day. This difference is partly accounted for by the fact that the Part I sample included one kindergarten class. Context variables having to do with grouping, direct work with the teacher, and the number of instructors were roughly equivalent across the samples.

In terms of instructional process, the average active teaching rating was relatively higher for the Part II sample (4.8 against 4.1). Use of L1 in instruction was somewhat less in the second year group,

Table 5.2

Classroom Context, Instructional Process, and Student Variables
for Part I and Part II Classes at Site 2

Variables	Part II Sample: Number of Classes	Part II Sample: Average	Part II Sample: (Range)	Part I Sample: Number of Classes	Part I Sample: Average	Part I Sample: (Range)
Classroom Context						
Time allocated to basic skills (min/day)	10	173	(97-233)	10	155	(109-183)
Porportion of school day in one instructional group	10	.71	(.34-.89)	10	.70	(.34-.94)
Proportion of school day > 2/3 students work directly with teacher	10	.60	(.35-.81)	10	.81	(.70-.93)
Proportion of school day when one instructor is present	10	.75	(.28-.94)	10	.59	(.01-1.00)
Instructional Process						
Average active teaching rating (scale 1-5)	10	4.2	(2.9-4.8)	10	4.2	---
Proportion L1 during basic skills instruction	10	.41	(.13-1.00)	10	.11	(.00-.35)
Student						
Student engagement rate in basic skills	10	.81	(.56-.95)	10	.73	(.63-.84)
Student proportion high accuracy during basic skills	10	.98	(.94-1.00)	10	(-)	(-)
Student engagement rate X proportion high accuracy in basic skills	10	.79	(.52-.95)	10	(-)	(-)
Estimated academic learning time (minutes of basic skills/ day)	10	134	(83-172)	10	(-)	(-)

Note: At Site 2, there were too few coding occasions in Part I to provide stable estimates of student proportion time on high accuracy tasks during basic skills. As a result, no estimates of ALT for Part I are included in this table.

Table 5.3

Categorization of Students by Participation Type
at Two Points in Time from Part I and Part II: Site 2

Participation Type	Part II Sample				Part I Sample*			
	Time A		Time B		Time A		Time B	
	Number of Students	Proportion of Sample	Number of Students	Proportion of Sample	Number of Students	Proportion of Sample	Number of Students	Proportion of Sample
Type I	28	.14	2	.12	2	.12	1	.11
Type II	29	.14	8	.43	4	.24	5	.56
Type III	31	.15	3	.18	2	.13	0	.00
Type IV	33	.16	4	.24	3	.18	2	.22
Type V	35	.17	0	.00	3	.18	1	.11
Type VI	18	.09	0	.00	3	.18	0	.00
Uncategorized	31	.15	0	.00	0	.00	0	.00

*Note: Allows for multiple categorization.

Table 5.4

Classroom Context, Instructional Process, and Student Variables for Part I and Part II Classes at Site 3

Variables	Part II Sample			Part I Sample		
	Number of Classes	Average	(Range)	Number of Classes	Average	(Range)
Classroom Context						
Time allocated to basic skills (min/day)	7	232	(219-250)	8	205	(72-255)
Porportion of school day in one instructional group	7	.46	(.13-.77)	8	.53	(.12-.89)
Proportion of school day > 2/3 students work directly with teacher	7	.51	(.20-.83)	8	.47	(.22-.73)
Proportion of school day when one instructor is present	7	.91	(.72-1.00)	8	.94	(.78-1.00)
Instructional Process						
Average active teaching rating (scale 1-5)	7	4.8	(4.6 - 5.0)	8	4.0	---
Proportion L1 during basic skills instruction	7	.13	(.00-.41)	8	.23	(.10-.39)
Student						
Student engagement rate in basic skills	7	.88	(.82-.95)	8	.83	(.66-.95)
Student proportion high accuracy during basic skills	7	.86	(.41-1.00)	8	.78	(.67-1.00)
Student engagement rate X proportion high accuracy in basic skills	7	.76	(.34-.95)	8	.74	(.50-.93)
Estimated academic learning time (minutes of basic skills/ day)	7	178	(75-226)	8	149	(67-207)

who averaged 13 percent of basic skills time, while the first year group averaged 23 percent. Judging from the range, the variation might be accounted for by the presence of one or more teachers who never used the students' home language during basic skills instruction. At this site, classifications of student participation types (presented in Table 5.5) showed a change toward the more positive end of the scale in Part I. In Part II, there appeared to be no change in participation types.

Site 4: Arizona

Seven teachers were included in the I-B sample at Arizona. Compared to teachers at Site 4 in Part I, the classroom context of Part II teachers was characterized by: (a) a greater proportion of basic skills time per schoold day; (b) a smaller proportion of the day where most students worked directly with the teacher; and (c) approximately equal proportions of time spent in whole group instruction or with only one instructor present, (See Table 5.6). The most striking difference was in time allocated to basic skills. In Part I, basic skills accounted for an average of 130 minutes per day; in Part II, the average was 195 minutes. The upper limit of the Part I range was the same as the lower limit for Part II. Once again, a partial explanation for this difference can be found in the inclusion of two kindergarten and four first grade classes in the Part I sample. In Part II, there were no kindergarten and only two first grade classes.

Instructional process variables were comparable across the samples. The average active teaching ratings were 4.3 and 4.1 for Parts I and II, respectively. Part I teachers allocated an average of 7 percent of their basic skills instruction to L1, while the Part II sample allocated 5 percent.

Although there were no dramatic differences in student variables across the two samples, there was a contrast in students' proportion of basic skills time on high accuracy tasks. In Part I, students worked on high accuracy tasks nearly 90 percent of the time, while in Part II, they did so only 76 percent of the time. This difference is reflected in the overall estimated ALT for Part II as well. This difference served to counterbalance somewhat the variation in time allocated to basic skills reported above. Like other sites, Site 4 student participation findings in Part I followed the trend toward more positive participation types. In Part II, no change appeared in the distributions of students from Time A to Time B (see Table 5.7).

Site 5: Oakland/San Francisco

The Substudy I-B sample at Site 5 includes 6 classes. Data for Site 5 are presented in Table 5.8. Once again, the proportion of time allocated to basic skills instruction was clearly higher in the Part II sample: an average of 130 minutes against an average of 99 minutes per school day in Part I. In this case, the inclusion of kindergartens would not appear to be a factor, since two kindergartens

Table 5.5

Categorization of Students by Participation Type
at Two Points in Time from Part I and Part II: Site 3

Participation Type	Part II Sample				Part I Sample*			
	Time A		Time B		Time A		Time B	
	Number of Students	Proportion of Sample	Number of Students	Proportion of Sample	Number of Students	Proportion of Sample	Number of Students	Proportion of Sample
Type I	28	.28	7	.25	8	.21	10	.30
Type II	23	.23	5	.18	12	.31	10	.30
Type III	7	.07	3	.11	5	.13	4	.11
Type IV	13	.13	7	.25	9	.23	4	.11
Type V	12	.12	3	.11	4	.10	4	.11
Type VI	4	.04	0	.00	0	.00	0	.00
Uncategorized	12	.12	3	.11	1	.02	2	.06

*Note: Allows for multiple categorization.

Table 5.6

Classroom Context, Instructional Process, and Student Variables for Part I and Part II Classes at Site 4

Variables	Part II Sample			Part I Sample		
	Number of Classes	Average	(Range)	Number of Classes	Average	(Range)
Classroom Context						
Time allocated to basic skills (min/day)	7	195	(164-215)	10	130	(70-164)
Porportion of school day in one instructional group	7	.42	(.17-.72)	10	.41	(.22-.51)
Proportion of school day > 2/3 students work directly with teacher	7	.35	(.11-.57)	10	.47	(.28-.74)
Proportion of school day when one instructor is present	7	.31	(.00-.79)	10	.24	(.02-1.00)
Instructional Process						
Average active teaching rating (scale 1-5)	7	4.1	(2.4-4.7)	10	4.3	-
Proportion L1 during basic skills instruction	7	.05	(.00-.26)	10	.07	(.00-.26)
Student						
Student engagement rate in basic skills	7	.76	(.69-.85)	10	.80	(.66-.93)
Student proportion high accuracy during basic skills	7	.76	(.55-.89)	10	.89	(.73-1.00)
Student engagement rate X proportion high accuracy in basic skills	7	.58	(.38-.75)	10	.71	(.53-.93)
Estimated academic learning time (minutes of basic skills/ day)	7	115	(76-161)	10	94	(40-126)

Table 5.7

Categorization of Students by Participation Type
at Two Points in Time from Part I and Part II: Site 4

Participation Type	Part II Sample				Part I Sample*			
	Time A		Time B		Time A		Time B	
	Number of Students	Proportion of Sample	Number of Students	Proportion of Sample	Number of Students	Proportion of Sample	Number of Students	Proportion of Sample
Type I	43	.19	5	.25	6	.16	11	.25
Type II	48	.22	5	.25	4	.11	6	.13
Type III	20	.09	1	.05	8	.21	4	.09
Type IV	39	.18	4	.20	4	.11	11	.25
Type V	42	.19	5	.25	11	.29	11	.25
Type VI	7	.03	0	.00	3	.08	0	.00
Uncategorized	23	.10	0	.00	2	.05	2	.04

*Note: Allows for multiple categorization.

Table 5.8

Classroom Context, Instructional Process, and Student Variables
for Part I and Part II Classes at Site 5

Variables	Part II Sample			Part I Sample		
	Number of Classes	Average	(Range)	Number of Classes	Average	(Range)
Classroom Context						
Time allocated to basic skills (min/day)	6	130	(71-188)	9	99	(45-129)
Porportion of school day in one instructional group	6	.40	(.27-.48)	9	.39	(.23-.53)
Proportion of school day > 2/3 students work directly with teacher	6	.46	(.35-.58)	9	.40	(.23-.56)
Proportion of school day when one instructor is present	6	.34	(.00-.53)	9	.28	(.12-.51)
Instructional Process						
Average active teaching rating (scale 1-5)	5	4.1	(2.9-4.9)	9	3.9	---
Proportion L1 during basic skills instruction	6	.02	(.00-.11)	9	.05	(.00-.21)
Student						
Student engagement rate in basic skills	6	.80	(.61-.91)	9	.86	(.76-.94)
Student proportion high accuracy during basic skills	6	.81	(.66-.95)	9	.77	(.62-.85)
Student engagement rate X proportion high accuracy in basic skills	6	.65	(.50-.83)	9	.66	(.49-.74)
Estimated academic learning time (minutes of basic skills/ day)	6	81	(59-112)	9	65	(33-96)

participated in each sample. Other classroom context variables showed small differences.

Neither instructional process variable showed a big difference when compared across the samples. The average active teaching rating was 3.9 in Part I and 4.1 in Part II; the proportion of time allocated to L1 was 5 percent in Part I and 2 percent in Part II. Notice, however, that this percentage is quite a bit lower than that reported from the other sites. The upper limit of time allocated to L1 in either Part I or II at Site 5 was 21 percent.

Measures of student performance were consistently high in the samples for both years. Over 80 percent of basic skills time was spent engaged, over 75 percent was spent on high accuracy tasks. The difference in estimated academic learning time in average minutes per day can be accounted for in part by the increase in time allocated to basic skills in the Part II sample. Student participation ratings at Site 5 (see Table 5.9) in Part I did not show as clearly the trend toward positive participation types; nor did there appear to be any identifiable trend in the I-B sample for Part II.

Site 8: Oregon

Site 8 was added in Part II of the SBIF study as part of the Substudy I-B sample, and thus had no data from Part I for comparison. It was included in order to answer the question of whether unnominated classrooms at a site in a different region of the country, and with a different ethnolinguistic population, had characteristics similar to those found in the Part I sample.

In Table 5.10, it can be seen that the results for Site 8 are, for the most part, comparable to the Part I findings. Consider first the classroom context variables. Time allocated to basic skills averaged 150 minutes per school day; 40 percent of the time was spent in one instructional group; 55 percent with most students working directly with the teacher; and 25 percent with only one instructor present.

Active teaching ratings were high (4.2), but teachers allocated only about 10 percent of the time in basic skills instruction to the use of the students' first language. This last figure is somewhat lower than that at most sites in Part I, but might be explained by the fact that 5 of the Site 8 classes were composed of Vietnamese students. Since teachers did not speak their language, but utilized Vietnamese-speaking instructional aides, the proportion of time allocated to L1 may appear low.

The patterns in the student learning process variables indicated that student engagement rates were relatively high but that percent time on high accuracy tasks was somewhat low resulting in somewhat lower estimates of academic learning time. Although there were no Part I data for Site 8, it appears that these variables were somewhat lower than the averages describing either the other sites in Part II

Table 5.9

Categorization of Students by Participation Type
at Two Points in Time from Part I and Part II: Site 5

Participation Type	Part II Sample				Part I Sample*			
	Time A		Time B		Time A		Time B	
	Number of Students	Proportion of Sample	Number of Students	Proportion of Sample	Number of Students	Proportion of Sample	Number of Students	Proportion of Sample
Type I	90	.33	6	.26	6	.15	12	.25
Type II	44	.16	7	.30	10	.24	8	.17
Type III	17	.06	1	.04	7	.17	5	.10
Type IV	29	.10	3	.13	5	.12	9	.19
Type V	69	.25	5	.22	11	.27	13	.27
Type VI	14	.05	0	.00	1	.03	1	.02
Uncategorized	12	.04	1	.04	1	.03	0	.00

*Note: Allows for multiple categorization.

Table 5.10

Classroom Context, Instructional Process, and Student Variables for Part II Classes at Site 8

Variables	Part II Sample Number of Classes	Average	(Range)
Classroom Context			
Time allocated to basic skills (min/day)	10	150	(109-209)
Porportion of school day in one instructional group	10	.40	(.10-.64)
Proportion of school day > 2/3 students work directly with teacher	10	.55	(.21-.78)
Proportion of school day when one instructor is present	10	.25	(.05 .71)
Instructional Process			
Average active teaching rating (scale 1-5)	10	4.2	(3.8-4.6)
Proportion L1 during basic skills instruction	10	.10	(.00-.22)
Student			
Student engagement rate in basic skills	10	.72	(.59-.84)
Student proportion high accuracy during basic skills	10	.65	(.40-.90)
Student engagement rate X proportion high accuracy in basic skills	10	.47	(.26-.75)
Estimated Academic Learning Time (minutes of basic skills/ day)	10	74	(28-136)

or the Part I averages. The student participation ratings at Site 8 showed relatively little movement from Time A to Time B (see Table 5.11).

Description of Substudy I-B Classes Based on Proportion of L1 Use During Basic Skills Instruction

This section presents descriptive information on selected classroom context, instructional process and student variables for the sample of I-B classes when the classes are grouped by proportion of L1 used during instruction in basic skills. Since the programs in kindergarten classes are usually half-day in length and differ in other potentially important ways from the higher grade levels, three kindergarten classes have been omitted from this analysis. The 43 non-kindergarten classes were grouped by proportion of L1 used during basic skills resulting in 8 classes with no L1 use, 13 with L1 use between .01 and .10, 11 classes with between .11 and .25 and 11 classes with more than .25.

Table 5.12 presents class means and standard deviations for L1 use groups on selected variables. The first row of the table indicates that all four groups of classes allocated substantial, and more or less equal, amounts of time to basic skills instruction and that the variability within group was similar from group to group. The proportion of time allocated to language proficiency development was also similar across groups with each group allocating approximately 20 percent of the school day to this goal.

The proportion of the school day spent in one instructional group and proportion of the school day when one instructor was present increased. That is, classes that used no L1 in basic skills had a smaller portion of the day during which the students operated as a whole group and also had a smaller portion of the day with only one adult instructor in the classroom. Classes using L1 for more than .25 percent of the time, on the other hand, spent almost two thirds of the day in whole group instruction with a single adult instructor. The proportion of the school day during which two thirds or more of the students worked directly with the teacher also tended to increase with proportion of L1 used. However, the high L1 use group did not fit the pattern. It would appear that the high L1 teachers did spend large portions of the day with the whole group but in spite of not having aides or other instructors available for most of the school day, the high L1 use teachers were able to differentiate instruction somewhat for the students in their classes.

The only teaching process variable in Table 5.12 is the active teaching rating. On this variable there was no detectable trend when comparing groups. That is, on the overall active teaching scale, the groups had high averages (4.1 to 4.3 on a 5-point scale). Additional information on active teaching is presented in Table 5.13. Four teaching moves that are often included in definitions of active teaching were included in a checklist that observers used during observation periods. When the observer saw an instance of one of the moves, it was recorded on the list. The first four rows of Table 5.13

Table 5.11

Categorization of Students by Participation Type
at Two Points in Time from Part II: Site 8

	Part II Sample			
	Time A		Time B	
Participation Type	Number of Students	Proportion of Sample	Number of Students	Proportion of Sample
Type I	32	.14	4	.17
Type II	91	.38	6	.26
Type III	15	.06	0	.00
Type IV	30	.13	7	.30
Type V	36	.15	1	.04
Type VI	13	.06	0	.00
Uncategorized	20	.08	5	.22

Table 5.12
Classroom Context, Instructional Process, and Student Variables for Classes Based on Proportion of L1 Use in Basic Skills

Variables	Proportion of L1 Used During Basic Skills			
	L1=0 (N=8)	.00< L1<.10 (N=13)	.10< L1<.25 (N=11)	L1>.25 (N=11)
Classroom Context				
Time Allocated to Basic Skills (minutes/day)	183(37)	185(47)	181(36)	175(38)
Time Allocated to Language Proficiency Development	.21(.10)	.16(.10)	.20(.10)	.23(.13)
Proportion of school day in one instructional group	.43(.16)	.48(.19)	.54(.26)	.63(.24)
Proportion of school day > 2/3 students work directly with teacher	.41(.14)	.49(.17)	.60(.20)	.56(.22)
Proportion of school day when one instructor present	.36(.36)	.46(.37)	.52(.42)	.70(.28)
Instructional Process				
Average active Teaching rating (scale 1-5)	4.3(.6)	4.2(.7)	4.3(.5)	4.1(.8)
Student				
Student engagement rate in basic skills	.77(.08)	.79(.10)	.75(.12)	.84(.07)
Student non-engagement rate during basic skills	.09(.07)	.09(.07)	.14(.09)	.11(.04)
Student interim engagement rate during basic skills	.12(.03)	.11(.06)	.11(.10)	.05(.04)
Student proportion high accuracy during basic skills	.77(.07)	.72(.25)	.61(.30)	.85(.26)
Student proportion medium accuracy during basic skills	.19(.08)	.24(.23)	.30(.24)	.13(.23)
Student engagement rate X proportion high accuracy in basic skills	.59(.08)	.57(.24)	.45(.24)	.72(.24)
Estimated academic learning time (minutes of basic skills/day)	110(33)	111(64)	85(56)	125(48)

NOTE: Numbers in parentheses are standard deviations.

Table 5.13

Index of Selected Instructional Processes in Classes Using Different Proportions of L1

Instructional Process	Proportion of L1 Used During Basic Skills			
	L1=.00 (N=8)	.00< L1<.10 (N=13)	.10< L1<.25 (N=11)	L1>.25 (N=11)
Active Teaching Behaviors				
Teacher actively presented information	.70	.66	.57	.57
Teacher maintained student engagement	.56	.50	.46	.42
Teacher monitors student work	.68	.62	.48	.49
Teacher provides instructional feedback	.56	.54	.50	.46
L1 Use				
Teacher used two languages for instruction	.00	.16	.15	.26
Teacher focuses on L1 or L2 development	.19	.18	.16	.21
Teacher uses/responds to cultural cues	.08	.19	.08	.12

present indices of the frequencies with which active teaching moves were checked during basic skills instruction. Note that over all four of the indices there is a decrease in the indices with increase in proportion of L1 use. Although the decrease does not seem to be great, it is relatively consistent, indicating that at least on these items the no L1 use group appeared to practice active teaching somewhat more frequently than the high L1 use teachers.

Turning to the student variables in Table 5.12, a more complex pattern is indicated. All student variables in Table 5.12 are related to academic learning time. Note that engagement rates are similar for the three lower groups on L1 use and somewhat higher (0.84) for the highest L1 use group. The proportion of non-engaged time is similar for Groups 1, 2, and 4 and somewhat higher for Group 3. The interim time, the time that students spend engaged on activities that indirectly support learning (passing materials, sharpening pencils, waiting for help, etc.), but are not the academic learning activity itself was similar in Groups 1, 2, and 3 but lower in the high L1 use group. Therefore, it would appear that the high L1 use group attained a higher than average engagement rate by keeping the interim time low while the off-task time was similar in all groups.

The proportions of student time on high and medium accuracy tasks during basic skills time show related trends. For proportion time on high accuracy tasks, the trend begins by decreasing with increasing use of L1 for Groups 1, 2, and 3 but then increases markedly in the highest L1 use group. This pattern is more or less U-shaped with Group 4 exceeding group 1. The trend on proportion of student time on medium accuracy tasks is an inverted U, constituting a reflection of the trend just described.

The product of student engagement rate and proportion student time on high accuracy tasks provides an index of the rate at which time allocated to a particular content area is converted to academic leaning time. In Table 5.12, this index is u-shaped. That is, the no L1 group is higher than Groups 2 and 3, but Group 4 is higher than all other groups.

The last row of Table 5.12 presents estimates of the average amount of academic learning time accumulated by target students in basic skills instruction per day. The highest academic learning time was found in the highest L1 use group (even though this group had the lowest allocated time in basic skills).

CHAPTER SIX

SUMMARY

Verification Substudy I-A

Substudy I-A addressed these questions: Would the features identified in Part I also characterize bilingual instruction in a sample of classes serving different ethnolinguistic groups than those examined in Part I? How replicable are the features for different ethnolinguistic populations?

Sample

Twenty-one classes were identified at two sites that had not been examined during Part I of the SBIF study. The Part I nomination process was replicated at each of the sites.

At Site 7 (Chicago), 10 classes were nominated as successful bilingual education settings for LEP students. The language background of the LEP students was Spanish. The Part II nominated settings had similar characteristics to the settings identified in the Part I sample. There were 10 classes at the site, the teachers had considerable experience in bilingual education, there were large proportions of LEP students in each of the classes, students' oral proficiency in English varied widely within classes, and the classes ranged in grade level from kindergarten through grade 6.

At Site 9 (Hawaii), the nominated sample consisted of 11 classes of LEP students whose cultural background was Filipino and whose first language was Ilokano. The teachers, like those in Part I sites, were relatively experienced in bilingual education. However, the program at Site 9 differed from the Part I sites in that it was a pull-out program. The Ilokano-speaking students were taken from their regular classes for approximately one and one-half hours per day and instructed by a teacher in the bilingual program. The students in these classes spent part of the day in monolingual English classrooms with students whose first language was English and part of the day in a bilingual classroom with students whose first language was Ilokano. The pull-out classes usually included a wide range of grade levels and ages. Students at Site 9 participated in a relatively complex environment since they had two sets of classmates and interacted with several teachers during the day. Of the Part I sites, Site 3 (Texas) used regrouping of classes frequently and, therefore, was to some extent similar to Site 9. However, at Site 3, Hispanic students were regrouped into different subgroups of Hispanic students for a portion of the school day. At Site 9, the Ilokano students spent part of the

day with English-speaking students and teachers and part of the day with Ilokano-speaking students and teachers. These features of the program at Site 9 may have implications for the quality and quantity of instruction at the site and should be kept in mind when considering the results of Substudy I-A. In addition, the data collected at Site 9 describe (in almost all cases) the bilingual pull-out program and not the monolingual English portion of the students' instruction.

Organization of Instruction

At Sites 7 and 9 there was a strong focus on basic skills instruction. The sites allocated 70 percent (Site 7) amd 41 percent (Site 9) of the school day to basic skills. The average on this variable for the Part I sites was 74 percent. Instruction in reading and language arts accounted for 54 percent (Site 7) and 27 percent (Site 9) while the average for Part I was 50 percent.

The allocation of time to various subject matters at Site 7 were very similar to those for Part I. The allocations for Site 9 appear to be less than those for Part I. Forty percent of the instructional day at Site 9, however, was coded as "other instruction." This substantial allocation represents a portion of the time students spent in monolingual English instruction. Undoubtedly, much of that time would have been allocated to basic skills and would therefore raise the estimates at Site 9 to the range reported for the Part I sites.

Students at Sites 7 and 9 spent similar portions of the school day in grouped instruction. Whole group instruction accounted for 53 percent of the instructional day at Sites 7 and 9 and, on the average, at the Part I sites. Students were instructed in two or more groups for 46 percent (Site 7), 34 percent (Site 9) and 46 percent (Part I average) of the instructional day. When students were grouped, the grouping criterion was student ability (including language ability) 83 percent (Site 7), 72 percent (Site 9) and 70 percent (Part I average) of the time.

The most common task assignment pattern involved more than two thirds of the students working directly with the teacher in the recitation mode. This configuration accounted for 51 percent (Sites 7 and 9) and 56 percent (Part I average) of the instructional day. Students worked in groups where each group had its own task for 31 percent (Site 7), 12 percent (Site 9) and 28 percent (Part I average) of the day. Two thirds or more of the students had common seatwork for 13 percent (Part I average) of the day.

One adult was present during instruction for 82 percent (Site 7), 47 percent (Site 9), and 50 percent (Part I average) of the time. The teacher and one aide were present during instruction for 17 percent (Site 7), 46 percent (Site 9), and 40 percent (Part I average) of the time.

Both Sites 7 and 9 followed the general pattern of organization for instruction that was identified at the Part I sites. Generally

the classes were organized along traditional lines. There was a strong focus on basic skills instruction; classes were instructed as a whole group more than half of the time; when students were grouped, two groups were most common; students were directly supervised by the teacher about half of the time; classes were characterized by relatively large amounts of seatwork, with tasks differentiated by student group for part of the time; and when students were grouped it was most often based upon ability. The similarity between this pattern at Site 7 and the average for Part I sites was quite striking. Although Site 9 followed the general pattern, there were several deviations. For example, Site 9 showed somewhat more differentiation in grouping practices than the Part I average. Since the classes at Site 9 often covered several grades and occasionally as many as five or six, a somewnat more differentiated grouping practice was not unexpected. In addition, Site 9 had teacher aides for about half the time during basic skills instruction. This pattern was quite different from the pattern at Site 7 but was not outside the range identified in the Part I sites.

Students were not teamed in order to complete assignments at either Site 7 or 9. Students had relatively little choice regarding instructional tasks and, in the main, were dependent upon the teacher for pacing and task completion. Instruction at the bilingual program at Site 9 allowed somewhat more student choice and independence compared with either Site 7 or the average for Part I sites.

Oral evaluation at Site 7 was very much like the pattern for Part I sites: instructional feedback was mostly positive and public, while non-instructional feedback was both positive and negative. Site 9 was somewhat different, in that there was practically no negative feedback either for instructional or non-instructional events, and very little non-instructional feedback, either positive or negative.

Allocation of Time

For the Part I sites, there were differences between the Hispanic sites and the non-Hispanic sites on allocation of time to L1 materials, L2 materials, and bilingual materials. The Hispanic sites used English language materials about 40 percent, Spanish language materials about 20 percent, and bilingual materials about 10 percent of the time. The non-Hispanic sites in Part I used English languages materials most often, L1 materials less often, and bilingual materials rarely if at all. These differences may reflect the greater availability of Spanish language materials compared to Navajo and Cantonese language materials. Sites 7 and 9 followed this pattern very closely. Site 7 was a Spanish language site and was similar in use of materials to the Part I Hispanic sites; Site 9, being non-Hispanic, relied heavily on English language materials.

The allocation of teacher time to the whole group as opposed to either subgroups of students or individual students was similar for Sites 7 and 9 and the Part I sites. Teacher allocated about 10 percent or less of their time to individual students, and split the remaining time between supervision of the whole group and subgroups.

The pattern of oral language use by teachers during basic skills instruction indicated that Site 9 was similar to the Part I sites but that Site 7 was somewhat different. The percentage of basic skills instruction time in English, L1, and silence for the sites were: 39, 55, 6 (Site 7); 60, 28, 12 (Site 9); and 60, 25, 15 (Part I average). At Site 7, Spanish was spoken somewhat more than one half of the time during basic skills instruction. This pattern varies from the pattern at Site 9 and at the Part I sites.

During basic skills instruction, teachers changed between L1 and L2 about 41 times per day on the average at the Part I sites. The averages for Sites 7 and 9 were 40 and 24 respectively and were well within the range found at Part I sites. The content of the first statement after a language change was categorized as instructional development, procedures/directions, or behavioral feedback. The percent of language changes in these categories for the Part I sites was: instructional development, 48 percent; procedures/directions, 33 percent; and behavioral feedback, 20 percent. The pattern for Site 7 was very similar to the pattern for Part I sites. The pattern for Site 9 showed that procedures/directions was much the same (29 percent) but behavioral feedback was lower (4 percent) and instructional development was higher (67 percent). It would appear that the students at Site 9 were relatively well behaved in school, since there was practically no non-instructional feedback from teachers and very few language changes associated with behavioral feedback.

The student or students to whom the first statement after a language change was directed was also noted. At the Part I sites, the first statements after a language change were directed to the whole group 50 percent of the time, a subgroup 25 percent of the time, or an individual student 25 percent of the time. Sites 7 and 9 varied from this pattern in that statements to the whole group and to subgroups were fewer (about 30 percent and 10 percent of the time, respectively) while statements to individuals increased considerably to about 60 percent of the time.

Thus for the pattern of language use at Sites 7 and 9 compared to the Part I sites, there were several notable variations. Site 7 teachers used L1 more than the average noted in Part I sites while Site 9 followed the Part I pattern. The frequency of language changes between L1 and L2 were similar to the Part I average for both Sites 7 and 9. The relatively high proportion of L1 used at Site 7 apparently had little or no effect on the frequency of language changes. At Site 9 the language changes appeared to support instructional development more and behavioral feedback less when compared to Site 7 and the Part I average. Teachers at both Sites 7 and 9 appeared to use language changes for individual students as opposed to groups of students when compared to the Part I sites.

Active Teaching

Ratings of active teaching included items on academic focus, direct instruction, pace, classroom management, and expectations.

The ratings on teachers at Sites 7 and 9 were uniformly high and corresponded to the results of ratings made at the Part I sites. On some items there were differences between the two new sites and the Part I sites. These differences, however, never occurred on more than one item within the same content category.

Academic learning time. Estimates of academic learning time and its components were made at Sites 7 and 9. The total time allocated to basic skills was estimated at 172 minutes per day (Site 7) and 101 minues per day (Site 9) while the average at the Part I sites was 128 minutes per day. Although the new sites vary somewhat from the Part I average, the estimates are well within the range identified at the Part I sites. The average time allocated to basic skills is dependent upon the distribution of grades in the sample at a given site. For example, kindergarten classes generally have half-day programs and therefore have relatively low allocations of time to basic skills instruction. If a site has several kindergarten classes in its sample then the average allocation to basic skills is likely to be relatively small. In addition to this caveat, the pull-out program at Site 9 very likely had substantial amounts of basic skills instruction outside of the bilingual program. As a result, the estimate of time allocated to basic skills for Site 9 is likely to be too low.

Students were engaged in academic tasks 77 percent (Site 7), 93 percent (Site 9) and 80 percent (Part I average) of the time during basic skills instruction. Students worked on high accuracy tasks for 56 percent (Site 7), 55 percent (Site 9) and 82 percent (Part I average) of the time during basic skills instruction. The engagement rate at Site 9 was somewhat higher than the Part I average but the percent time on high accuracy tasks was lower at both Sites 7 and 9 compared to the Part I average. The product of engagement rate and percent time on high accuracy tasks yields an index of the rate at which allocated time is converted to academic learning time. The estimates on this product are 43 percent (Site 7), 51 percent (Site 9), and 66 percent (Part I average). Applying these conversion rates to the time allocated to basic skills instruction provides estimates of academic learning time in basic skills per day of 74 minutes (Site 7), 51 minutes (Site 9), and 85 minutes (Part I average). Note that the academic learning time estimates are based on the four target students in each of the classes. Since the target students are not randomly chosen, the average over target students in a class does not represent the class average very well. With this caveat in mind and considerations surrounding the estimates of time allocated to basic skills mentioned above, the estimates of academic learning time should not be overinterpreted. It would appear that the percent time on high accuracy tasks is lower at Sites 7 and 9 compared to the Part I average and, regardless of the estimates of allocated time, this difference will result in lower rates of accumulation of academic learning time in these sites compared to the Part I average.

Student Participation Types

Profiles of student participation characteristics were used to categorize students in six student instructional participation types.

The overall distributions of students were not unlike the overall distributions derived for the Part I sites. The proportions of students in each of the six categories for both Sites 7 and 9 were within the ranges identified at the Part I sites. Since data on student participation types were available at two points in time for Site 9, an analysis of change in type was undertaken. The comparison of distribution of participation types from January to May of the same school year at Site 9 indicated that students were moving towards the more success oriented participation types. This result for Site 9 was similar to the results for the Part I sites.

Discussion

The description of bilingual instruction of LEP students at Sites 7 and 9 indicates many similarities between these sites and the Part I sites. However, both Sites 7 and 9 had several idiosyncratic characteristics that differentiated them from each other and from the Part I sites. The overall pattern, as well as the differences, are summarized above. The major features of the Part I sites were supported in part by the analysis of the data from Sites 7 and 9. The following paragraphs comment on the five features identified at the Part I sites.

The congruence of instructional intent, organization and delivery of instruction, and student consequences was identified as a feature of successful bilingual instruction in the Part I study. This finding was moderately supported by Substudy I-A. The degree of support that was possible from Substudy I-A was constrained for methodological reasons. The process by which the feature was identified in Part I consisted of cross-case analysis of nine case studies. It was in these case studies that teacher intent was indexed and subsequently related to instructional behaviors. Since the case studies were not replicated in Part II of the study, the link between teacher intent and organization and delivery of instruction could not be investigated. However, the organization and delivery of instruction and student consequences were described at Sites 7 and 9. The organization and delivery of instruction was similar to that identified in the Part I sites. In addition, students at Sites 7 and 9 demonstrated relatively high accumulations of academic learning time (although there was a noticeable decrease in the percent time students spent on high accuracy tasks) and students at Site 9 showed positive shifts in participation type over a portion of the school year. These characteristics, found in either or both Sites 7 and 9 and in the Part I sites, provide indirect support for the claim that teachers in successful bilingual settings are characterized by congruence of instructional intent, organization and delivery of instruction, and student consequences.

The second feature of successful bilingual instruction in the Part I sample involved the frequent and consistent use of active teaching behaviors. Substudy I-A supported this finding in that the teachers at both new sites used active teaching behaviors extensively in their instruction of LEP students, as evidenced by consistently high observer ratings and analysis of teacher protocols.

Instruction of LEP students in the Part I sample was characterized by the use of both English and L1. This feature was replicated in the sample of classes in Substudy I-A. Both new sites used two languages for instruction in basic skills. The evidence clearly indicates that two languages were used for instructional development rather than for purposes of behavioral feedback. Language alternation was apparently used to differentiate instruction and was most often directed to individual LEP students.

Instruction of LEP students in the Part I sample of successful bilingual settings featured the integration of English language development with basic skills instruction. Some direct and indirect support for this feature was found in the sample of classes in Substudy I-A. The strong emphasis on basic skills instruction in conjunction with the use of two languages during basic skills and the functional use of language changes for instructional development provide indirect evidence for the feature. Direct support was noted in the teacher protocols and from observations of classroom practice indicating that LEP students did develop English language skills in the context of basic skills instruction. The situation at Site 9 was less clear in that the bilingual program was a pull-out program. However, in this portion of the program, LEP students were instructed in both basic skills and English language development instead of just the latter.

In the Part I sample, instruction of LEP students used information from the students' home culture. This feature of bilingual instruction was also found to characterize the two sites in Substudy I-A. Both sites were rated higher in the use of cultural referents by observers than the Part I sites. This feature was also supported by site project directors' analysis of teacher protocols for use of cultural information during instruction.

Verification Substudy I-B

Substudy I-B addressed the question: Would the features identified in Part I also characterize instruction received by LEP students generally? That is, would the same features be identified in a sample of classes that were not selected using the nomination procedure and that did not necessarily implement bilingual instruction?

Sample

The classes participating in Substudy I-B were taken from five of the Part I sites and one new site. A total of 46 classes were chosen, 36 from the Part I sites and 10 from the Oregon site. None of the classes had been identified by the SBIF study nomination procedure. In the Part I sites, most classes were selected because students from Part I classes had "passed" into them. Therefore most of the Substudy I-B classes were in schools that had participated in Part I of the SBIF study. Four target students were selected per

class using the same criteria of rated oral language proficiecy, sex, and participation type as was used in other SBIF study activities. All target students had been in bilingual programs for the previous year of schooling.

All classes were at the elementary school level. The sites included representatives from four major language groups--Spanish, Navajo, Cantonese, and Vietnamese. The teachers were relatively experienced in elementary classrooms and the majority had taught in bilingual programs for several years. Selected classroom context, instructional process, and student variables were examined.

Within-Site Analysis

The first portion of the analysis was conducted separately by site. For each site, descriptive data were presented for the Substudy I-B sample and for the Part I sample.

At Site 1, the two samples were similar on proportion of the day allocated to instruction in one group, proportion of the day with at least two thirds of the students working directly with the teacher, proportion of the day with one instructor present, proportion of basic skills instruction in L1, and student engagement rate. On the other hand, the Substudy I-B sample allocated more time to basic skills instruction, had a slightly lower average rating on active teaching, and showed much lower percent student time on high accuracy tasks when compared to the Part I sample. The percent time on high accuracy tasks was also reflected in the product of percent time on high accuracy tasks and student engagement rate and in the estimate of academic learning time. However the increase in allocated time and decrease in percent time on high accuracy tasks in the I-B sample tended to cancel out in the estimation of academic learning time. Students in the I-B sample showed a positive change in participation style comparable to that found in the Part I sample.

At Site 2, the two samples (I-B and Part I) were similar on proportion of the school day that students spend in one instructional group, and student engagement rates. The Substudy I-B sample appeared to be higher on time allocated to basic skills, lower on proportion of the school day when more than two thirds of the students work directly with the teacher, higher on proportion of the school day with one adult instructor, and higher on proportion of L1 use. Due to missing data in Part I, no comparison could be made regarding academic learning time. Student distributions by participation type improved slightly in both samples.

At Site 3, the Substudy I-B sample was characterized by higher allocated time to basic skills, higher active teaching ratings, and lower use of L1. On all other variables examined in Substudy I-B, the two samples appeared to be similar.

At Site 4, the two samples (I-B and Part I) were similar on proportion of the school day in one instructional group, proportion of the school day with one instructor, active teaching ratings, proportion

of L1 used during basic skills, and student engagement rates. The I-B sample appeared to be higher on time allocated to basic skills, lower on proportion of student time on high accuracy tasks, and higher on estimated academic learning time. The distribution of student participation types from Time A to Time B showed slight but positive change for both I-B and Part I students.

At Site 5, the Substudy I-B sample allocated more time to basic skills than the Part I sample. On the other variables the samples appeared to be similar. Since Site 8 had data only for Substudy I-B and not for Part I, it is omitted from this analysis.

Across sites the greatest apparent difference between the Substudy I-B sample and the Part I sample concerned allocation of time to basic skills instruction. At five sites the allocation was greater in the Substudy I-B sample. Since this increase was not related to language use (see analysis by proportion of L1), it would appear that there were administrative decisions as well as other factors that led to increase from the 1980-81 school year (Part I sample) to the 1981-82 school year (Substudy I-B). At two sites (2 and 4), the non-nominated sample (Substudy I-B) allocated somewhat less time to large groups instructed directly by the teacher compared to the nominated sample (Part I). The only other pattern that arose indicated that two sites (1 and 4) showed lower percent time on high accuracy tasks for the non-nominated classes compared to the nominated classes. Both nominated and non-nominated samples were similar on proportion of time in one group instruction, proportion of time with one adult instructor, active teaching ratings of the teacher, proportion of L1 used in basic skills instruction, student engagement rates, academic learning time (note differences in time allocation and percent time on high accuracy tasks) and student participation characteristics.

Proportion of L1 Used

When classes in the Substudy I-B sample were grouped by proportion of L1 used during basic skills, two trends appeared. First, the higher the proportion of L1 used, the higher the proportion of the school day spent in one instructional group with one adult instructor present. Second, a U-shaped trend was found on the proportion of student time on high accuracy tasks. In classes with no L1 use the proportion of student time on high accuracy tasks was moderately high. The proportion declined initially as proportion of L1 increased and then, for proportion of L1 greater than .25, the proportion of student time on high success tasks increased markedly. This trend affected academic learning time as well. Note that allocation of time to basic skills and student engagement rates did not depend upon proportion of L1 use. However, the highest L1 use group was described as having the highest academic learning time. This was true in spite of the fact that allocated time was slightly lower for this group and that there was some evidence of slightly lower active teaching ratings for this group. It is tempting to hypothesize a threshold effect for proportion of L1 use. That is, the consequences for students of minimal

amounts of L1 may be limited or even negative, but with substantial proportions of L1, the consequences for LEP students in terms of variables like academic learning time increase substantially. This point must be considered speculative without careful replication. For example, there were methodological differences in the assessment of percent time on high accuracy tasks that could have influenced the analysis. All sites were not equally represented in the four L1 user groups and therefore any between site differences in method could have affected the result.

Two other points arising from the analysis of proportion of L1 use warrant comment. The first concerns allocation of time. Note that groups based upon proportion of L1 use did not differ on amount of time allocated to basic skills, nor did they differ on proportion of time allocated to language proficiency development. On the other hand, there was considerable variation among classes within any one group. The point is that there is plenty of variation in time allocation but it does not appear to be related to proportion of L1 use. The second point concerns student engagement rate. There is plenty of variation among target students on engagement rate but those differences do not appear to be related to proportion of L1 use. This point helps provide some perspective on percent time on high accuracy tasks since this variable does appear to have a complex relationship with proportion of L1 use. If instruction in two languages encourages learning among LEP students, it would appear to operate via task difficulty more so than by increases in engagement rates.

Discussion

In Part I of the SBIF study, several features of bilingual instruction for LEP students were identified in a special sample of instructional settings. In Part I, all classes had been nominated by local stakeholders as successful implementations of bilingual instruction. As one of the activities in Part II of the SBIF study, similar data collection and analysis procedures were used to describe instruction of LEP students in a non-nominated sample of classes. The guiding question was, "Will the features identified in Part I be found in non-nominated classes, or are the Part I features unique to those classrooms that were nominated as successful implementations of bilingual instruction?"

In interpreting the results of Substudy I-B it is important to bear several points in mind. The Part I and Substudy I-B samples do not represent extreme groups on any clearly defined dimensions. All classes in Part I were nominated as being successful by persons knowledgeable about the sites. The nominated classes tended to come from approximately 3 or 4 schools at a given site. The sample for Substudy I-B was obtained by following students from the Part I sample to their new classes in the subsequent school year. This procedure was used so that longitudinal data would be available for Substudy II-B (Guthrie & Fisher, 1983). As a result, the vast majority of classes in Substudy I-B were in the same school as the "successful" settings examined in Part I. Almost all target students in Substudy I-B had been in well-run bilingual programs for at least the previous

year of schooling and in some cases for several previous years of schooling. Therefore, if there are carryover effects from participation in nominated classes, these effects were likely to occur in the Substudy I-B non-nominated classes. In addition, the nomination of several teachers in a given school in Part I may indicate that the school as a whole has a relatively sound bilingual program. If these school effects are real, then any gap between the Part I and Substudy I-B samples is likely to be reduced since, with a few exceptions, the samples existed in the same set of schools. Furthermore, the Substudy I-B sample was made up of non-nominated classes, meaning that the I-B classes were not identified in the Part I nomination process. This did not mean that the I-B classes were necessarily unsuccessful, ineffective, or characterized by poor quality instruction. The point here is that it is unreasonable to expect great differences between classes in the two samples since there are several mechanisms that mitigate against such differences. Even though the Substudy I-B sample includes some monolingual English instruction as well as bilingual instruction, the contexts within which the classes operate must be taken into account. No simple comparisons between bilingual and monolingual instruction or successful and unsuccessful instruction are warranted.

The first feature identified in the Part I sample concerned the congruence of instructional intent, organization and delivery of instruction, and student consequences. Substudy I-B did not address this feature directly and therefore provides no data on this point.

The second feature identified in the Part I sample was that teachers used active teaching behaviors. In the Substudy I-B sample, one site had lower ratings and one site had higher ratings on active teaching behaviors. The two samples at the other sites were rated similarly. Teachers in both samples received relatively high r ings on use of active teaching. It would appear then that the use of active teaching may be important for the instruction of LEP students but that use of active teaching did not distinguish the Part I sample from the Substudy I-B sample. The teachers in the two samples were experienced classroom instructors and exhibited active teaching relatively often. When the Substudy I-B sample was grouped by proportion of L1 used during basic skills instruction, high L1 users were not "more active." There was some evidence to indicate that the highest L1 users were rated marginally "less active" than the remainder of the sample, although the average for the sample was high.

It seems clear that the allocation of time to basic skills was higher in the Substudy I-B sample than in Part I. However, there was no difference in allocation pattern for groups differing in proportion of L1 usage. It would appear that the increase in allocation to basic skills is not a function of language use or nomination versus non-nomination, but in all likelihood is a year-to-year difference reflecting the back-to-basics policies that have recently affected a great many districts in the country.

Instruction in both samples appeared to be highly structured; there were large portions of time spent in one group instruction working directly with an instructor, and instruction was carried out

by one adult for the major portion of the school day. Within these instructional contexts, there appeared to be no difference in target student engagement rates during basic skills either between samples or between groups of classes in Substudy I-B that used differing proportions of L1.

There were differences in the proportion of time students spent on high accuracy tasks. The Part I classes were higher on this variable than the Substudy I-B classes and, within the I-B classes, those using high proportions of L1 had more time on high accuracy tasks than the remaining classes. Although this relationship is not simple, it would appear that the high L1 users are able to adjust task difficulty more often for LEP students and thereby allow them to accumulate relatively higher amounts of academic learning time. Classes with high use of L1 in Substudy I-B compared to non- or low-users had higher accumulations of academic learning time on the part of target students in spite of marginally lower active teaching ratings, marginally lower allocations of time to basic skills, and having a single instructor for most of the day. Although the relationships are complex, it would appear from these descriptive data that the difference is due to high L1 use operating primarily to increase task appropriateness rather than an effect due to active teaching or to higher allocations of time to basic skills.

The third feature identified in the Part I sample concerned the use of L1 and English for instruction. Although this statement is to a great extent an artifact of the Part I sample selection, there is evidence from Substudy I-B that the use of two languages for instruction appears to be characteristic of quality instruction for LEP students when the program provides more than token amounts of L1.

The fourth feature identified in the Part I sample concerned the integration of English language development with basic skills instruction. The sample in Substudy I-B was characterized by a relatively strong focus on language development similar to that found in the Part I sample. Within the Substudy I-B sample the amount of time spent on language development was not a function of proportion of L1 used by the instructor. It would appear that these classes integrated language development with basic skills instruction for monolingual English students as well as LEP students.

The fifth feature concerns the use of information from the LEP students' home culture during instruction. Empirical study of this issue is fraught with difficulty since the boundaries of culture are unclear at best. In Part I of the SBIF study, target student protocols yielded examples of the use of cultural information. In the Substudy I-B sample, student protocols provided similar instances of use of cultural information. When the Substudy I-B classes were grouped according to proportion of L1 usage during basic skills instruction, instances of use of cultural information occurred in all four groups. Group II (L1 use greater than zero but less than 10% during basic skills instruction) had the highest frequency of cultural use codings. Cultural referents may have accounted for the little L1 usage that did occur in these classes. However, the high L1 users

also had a relatively high rating on use of cultural information compared to Group I (no use of L1) and Group II (L1 use between 10% and 25% during basic skills). It seems clear that the I-B sample did incorporate cultural information into instruction, but the degree of usage does not appear to be related to proportion of L1 use. It may be, however, that language itself is one of the stronger carriers of cultural information in the classroom and that the methodology used in Substudy I-B did not reduce this natural confounding.

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